CE Test Report

Product Name ： Scanner

Model No. ： IRIScan™ Pro 3 Wifi

Applicant ： AVISION INC.

Address ： No.20, Creation Rd.1, Science Park, Hsinchu, Taiwan 300 R.O.C.

Date of Receipt ： 2013/10/11

Report No. ： 13A0229R-ITCEP07V06

Issued Date ： 2013/10/17

Report Version ： V2.0

CE

Declaration of Conformity

The following products is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the laws of the Member States relating to Electromagnetic Compatibility Directive (2004/108/EC). The listed standard as below were applied:

The following Equipment:

Product	:	Scanner
Trade Name	:	IRIS
Model Number	:	IRIScan™ Pro 3 Wifi

This product is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the laws of the Member States relating to Electromagnetic Compatibility Directive (2004/108/EC). For the evaluation regarding EMC, the following standards were applied:

Emission:

EN 55022: 2010/AC: 2011 Class B ETSI EN 301 489-17: V2.2.1 (2012-09) ETSI EN 301 489-1: V1.9.2 (2011-09)	:	Emission standard
EN 61000-3-2: 2006+A2: 2009 Class A	:	Limits for harmonic current emission
EN 61000-3-3: 2008	:	Limitation of voltage fluctuation and flicker in low-voltage supply system

Immunity:

EN 55024: 2010 ETSI EN 301 489-17: V2.2.1 (2012-09) ETSI EN 301 489-1: V1.9.2 (2011-09)	:	Immunity standard

The following importer/manufacturer is responsible for this declaration:

Company Name : _____

Company Address : _____

Telephone : _____ Facsimile: _____

Person is responsible for marking this declaration:

_____ _____

Name (Full Name) Position/ Title

_____ _____

Date Legal Signature

QTK No.: 13A0229R-ITCEP07V06

CE

Statement of Conformity

The certifies that the following designated product

Product	:	Scanner
Trade Name	:	IRIS
Model Number	:	IRIScan™ Pro 3 Wifi
Company Name	:	AVISION INC.

This product is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the laws of the Member States relating to Electromagnetic Compatibility Directive (2004/108/EC). For the evaluation regarding EMC, the following standards were applied:

Emission:

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ETSI EN 301 489-17: V2.2.1 (2012-09)	
ETSI EN 301 489-1: V1.9.2 (2011-09)	
EN 61000-3-2: 2006+A2: 2009 Class A	: Limits for harmonic current emission
EN 61000-3-3: 2008	: Limitation of voltage fluctuation and flicker in low-voltage supply system

Immunity:

EN 55024: 2010	: Immunity standard
ETSI EN 301 489-17: V2.2.1 (2012-09)	
ETSI EN 301 489-1: V1.9.2 (2011-09)	

TEST LABORATORY

Ben Wu

Ben Wu / Project Manager

The verification is based on a single evaluation of one sample of above-mentioned products. It does not imply an assessment of the whole production and does not permit the use of the test lab. Logo.

QuieTek Corporation / No.75-2, Wang-Yeh Valley, Yung-Hsing, Chiung-Lin, Hsin-Chu County, Taiwan, R.O.C.
Tel: 886-3-5928858, Fax: 886-3-5928859, E-mail: service@quietek.com

Test Report Certification

Issued Date : 2013/10/17
Report No. : 13A0229R-ITCEP07V06

QuieTek

Product Name	:	Scanner
Applicant	:	AVISION INC.
Address	:	No.20, Creation Rd.1, Science Park, Hsinchu, Taiwan 300 R.O.C.
Manufacturer	:	(1) AVISION INC. (2) AVISION (Suzhou) CO., LTD
Model No.	:	IRIScan™ Pro 3 Wifi
EUT Voltage	:	Mode 1/2: DC 3.7V (Power by Battery) Mode 3/4/5: AC 100-240V, 50/60Hz
Trade Name	:	IRIS
Applicable Standard	:	EN 55022: 2010/AC: 2011 Class B ETSI EN 301 489-17: V2.2.1 (2012-09) ETSI EN 301 489-1: V1.9.2 (2011-09) EN 61000-3-2: 2006+A2: 2009 EN 61000-3-3: 2008 EN 55024: 2010
Test Result	:	Complied
Performed Location	:	Hsinchu EMC Laboratory No. 75-2, 3rd Lin, Wangye Keng, Yonghxing Tsuen, Qionglin Shiang, Hsinchu County 307, Taiwan TEL:+886-3-592-8858 / FAX:+886-3-592-8859

Documented By : Fonbo Fang

(Fonbo Fang / Engineering Adm. Assistant)

Reviewed By : Mensheo Sie

(Mensheo Sie / Engineer)

Approved By : Ben Wu

(Ben Wu / Project Manager)

Laboratory Information

We , **QuieTek Corporation**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted (audited or listed) by the following related bodies in compliance with ISO 17025, EN 45001 and specified testing scopes:

Taiwan R.O.C.	**:**	**BSMI, NCC, TAF**
Norway	**:**	**Nemko, DNV**
USA	**:**	**FCC**
Japan	**:**	**VCCI**

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site : http://www.quietek.com/tw/ctg/cts/accreditations.htm
The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : http://www.quietek.com/
If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

HsinChu Testing Laboratory :
No.75-2, 3rd Lin, Wangye Keng, Yonghxing Tsuen, Qionglin Shiang, Hsinchu County 307, Taiwan
TEL:+886-3-592-8858 / FAX:+886-3-592-8859 E-Mail : service@quietek.com

LinKou Testing Laboratory :
No. 5, Ruei-Shu Valley, Ruei-Ping Tsuen, Lin-Kou Shiang, Taipei, Taiwan
TEL : 886-2-8601-3788 / FAX : 886-2-8601-3789 E-Mail : service@quietek.com

TABLE OF CONTENTS

1. General Information

1.1. EUT Description

Product Name	Scanner
Trade Name	IRIS
Model No.	IRIScan™ Pro 3 Wifi

Component	
USB Cable	Shielded, 1.0m, one ferrite core bonded
Power Adapter	DVE, DSC-5CU-05 050100 I/P: 100-240V, 50/60Hz, 0.2A O/P: +5V⎓1A

Note:

1. This EUT is a Scanner.

1.2. Mode of Operation

QuieTek has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Pre-Test Mode	
Mode 1: Scan to SD Mode 2: WiFi Mode 3: Read Mode 4: Scan to PC Mode 5: Charge	
Final Test Mode	
Emission	Mode 1: Scan to SD Mode 2: WiFi Mode 3: Read Mode 4: Scan to PC Mode 5: Charge
Immunity	Mode 1: Scan to SD Mode 2: WiFi Mode 3: Read Mode 4: Scan to PC Mode 5: Charge

1.3. Tested System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

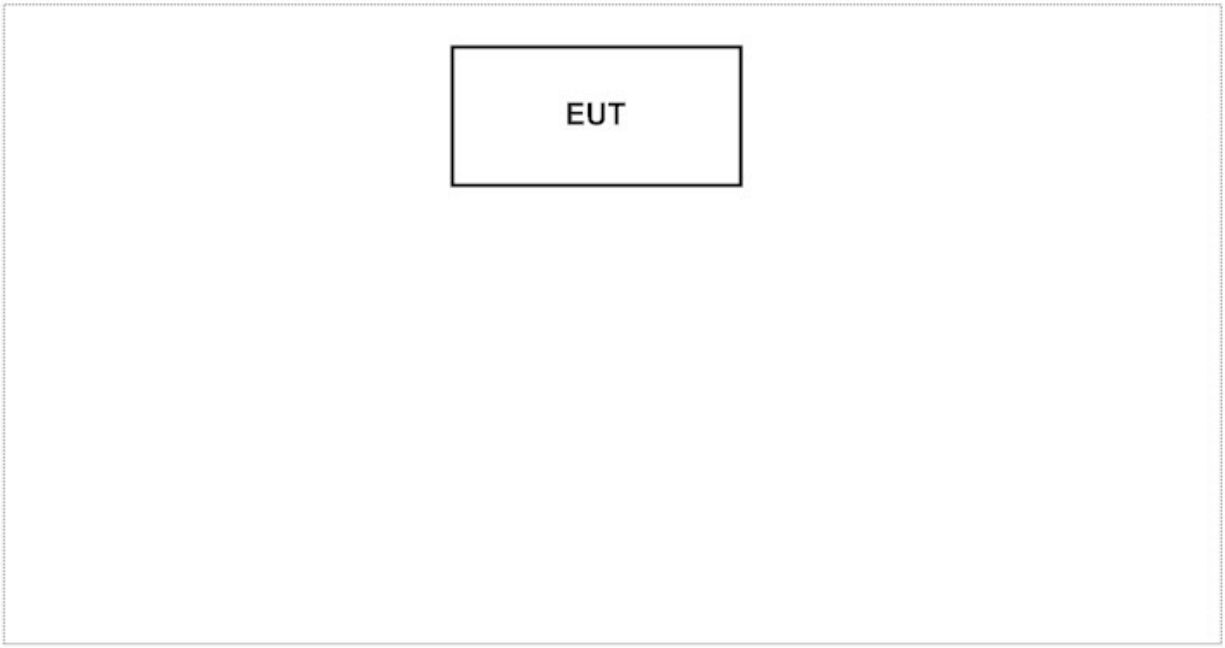
Test Mode	Mode 1: Scan to SD Mode 2: WiFi Mode 5: Charge

N/A

Test Mode		Mode 3: Read Mode 4: Scan to PC			
Product		Manufacturer	Model No.	Serial No.	Power Cord
1	Monitor	CHI MEI	A170E1-09	3UC120954HA0063	Non-Shielded, 1.8m
2	Notebook PC	HP	NX6320	CNU62D1F5Y	Non-Shielded, 1.8m
3	Modem	ACEEX	DM-1414	0102027545	Non-Shielded, 1.6m
4	USB 2.0 Flash Memory	Apacer	AH223	N/A	--
5	USB 2.0 Flash Memory	Apacer	AH223	N/A	--
6	Microphone & Earphone	Fujiei	SBZ-38	N/A	--
7	USB Mouse	Logitech	M-UV83	LZE35006044	--
8	Printer	HP	C2642A	MY75L1D2XN	Non-Shielded, 0.7m

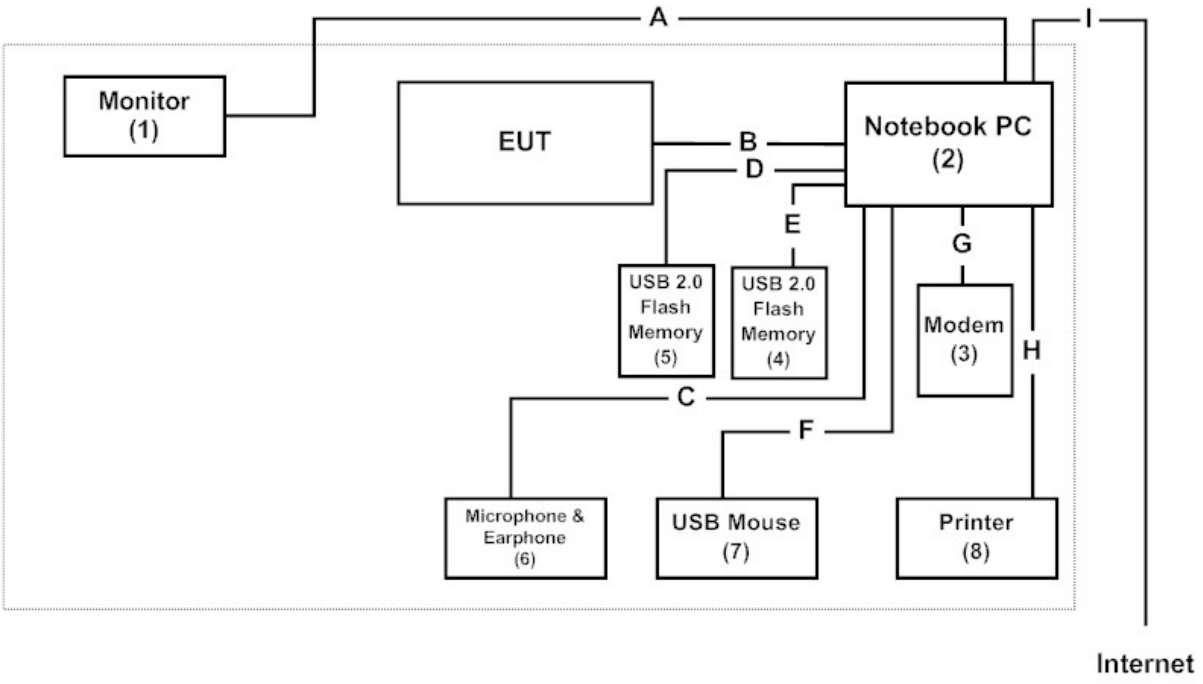
1.4. Configuration of Tested System

Test Mode	Mode 1: Scan to SD Mode 2: WiFi Mode 5: Charge
Connection Diagram	



Test Mode	Mode 3: Read Mode 4: Scan to PC

Connection Diagram



Signal Cable Type		Signal cable Description
A	VGA Cable	Shielded, 1.5m
B	USB Cable	Shielded, 1.0m, one ferrite core bonded
C	Microphone & Earphone Cable	Non Shielded, 1.8m
D	USB 2.0 Flash Memory Cable	Shielded, 1.0m
E	USB 2.0 Flash Memory Cable	Shielded, 1.0m
F	USB Mouse Cable	Shielded, 1.6m, one ferrite core bonded
G	Modem Cable	Shielded, 1.5m
H	Printer Cable	Shielded, 1.2m
I	LAN Cable	Non Shielded, 10m

1.5. EUT Exercise Software

1	Setup the EUT and simulators as shown on 1.4. (refer to 1.4 configuration of tested system).
2	Turn on the power of all equipment
3	Boot the Notebook PC from Hard Disk.
4	Notebook PC reads test software from disk and then sent to scanner.
5	The EUT will start to operate and scan the video figure into Notebook PC.
6	Notebook PC will display ” video figure” on monitor.
7	Repeat the above procedure (4) to (6).

2. Technical Test

2.1. Summary of Test Result

☒ No deviations from the test standards

☐ Deviations from the test standards as below description:

Emission			
Performed Item	Normative References	Test Performed	Deviation
Conducted Emission	EN 55022: 2010/AC: 2011 ETSI EN 301 489-17: V2.2.1 (2012-09) ETSI EN 301 489-1: V1.9.2 (2011-09)	Yes	No
Impedance Stabilization Network	EN 55022: 2010/AC: 2011 ETSI EN 301 489-17: V2.2.1 (2012-09) ETSI EN 301 489-1: V1.9.2 (2011-09)	No	No
Radiated Emission	EN 55022: 2010/AC: 2011 ETSI EN 301 489-17: V2.2.1 (2012-09) ETSI EN 301 489-1: V1.9.2 (2011-09)	Yes	No
Power Harmonics	EN 61000-3-2: 2006+A2: 2009	Yes	No
Voltage Fluctuation and Flicker	EN 61000-3-3: 2008	Yes	No

Immunity			
Performed Item	Normative References	Test Performed	Deviation
Electrostatic Discharge	IEC 61000-4-2 Ed. 2.0: 2008 EN 61000-4-2: 2009	Yes	No
Radiated susceptibility	IEC 61000-4-3 Ed. 3.2: 2010 EN 61000-4-3: 2006+A1: 2008+A2: 2010	Yes	No
Electrical fast transient/burst	IEC 61000-4-4 Ed. 3.0: 2012 EN 61000-4-4: 2004+A1: 2010	Yes	No
Surge	IEC 61000-4-5 Ed. 2.0: 2005 EN 61000-4-5: 2006	Yes	No
Conducted susceptibility	IEC 61000-4-6 Ed. 3.0: 2008 EN 61000-4-6: 2009	Yes	No
Power frequency magnetic field	IEC 61000-4-8 Ed. 2.0: 2009	Yes	No
Voltage dips and interruption	IEC 61000-4-11 Ed. 2.0: 2004 EN 61000-4-11: 2004	Yes	No

2.2. List of Test Equipment

Conducted Emission/ SR3

Instrument	Manufacturer	Model No.	Serial No.	Next Cal. Date
LISN	R&S	ENV216	100096	2014/08/01
LISN	R&S	ESH3-Z5	836679/022	2014/01/20
Test Receiver	R&S	ESCS 30	825442/017	2014/01/01
Coaxial Cable	Harbour	RG-400	SR3	2014/08/14
Quietek EMI system	Quietek	Version 2.2	SR3	N/A

Radiated Emission/ Site2 (Under 1GHz)

Instrument	Manufacturer	Model No.	Serial No.	Next Cal. Date
Bilog Antenna	Schaffner	CBL6112B	2891(Site2)	2014/08/14
Spectrum Analyzer	Advantest	R3162	121200166	2014/02/22
Test Receiver	R&S	ESCS 30	836858/023	2014/03/07
Coaxial Switch	Anritsu	MP59B	6200410246(Site2)	2014/03/31
Coaxial Cable	Suhner	RG-214U	Site2-1	2014/03/31
Quietek EMI system	Quietek	Version 2.2	Site2	N/A

Radiated Emission/ CB1 (Above 1GHz)

Instrument	Manufacturer	Model No.	Serial No.	Next Cal. Date
k Type Cable	Huber Suhner	Sucoflex 102	25623/2	2014/02/21
Double Ridged Guide Horn Antenna	Schwarzback	BBHA 9120	D743	2014/02/17
Pre-Amplifier	MITEQ	JS41-00104000-58-5P	1438359	2014/04/21
PSA Series Spectrum analyzer	Agilent	E4440A	MY46187335	2014/01/27
Quietek EMI system	Quietek	Version 2.2	CB1	N/A

Power Harmonics/ SR1

Instrument	Manufacturer	Model No.	Serial No.	Next Cal. Date
EMC Emission Tester	EMC PARTNER	Harmonics-1000-1P	109	2014/03/24

Voltage Fluctuation and Flicker/ SR1

Instrument	Manufacturer	Model No.	Serial No.	Next Cal. Date
EMC Emission Tester	EMC PARTNER	Harmonics-1000-1P	109	2014/03/24

Electrostatic Discharge/ SR1

Instrument	Manufacturer	Model No.	Serial No.	Next Cal. Date
Electrostatic Simulator Discharge	NoiseKen	ESS-2002	ESS04Z3759	2014/06/25
Horizontal Coupling Plane (HCP)	QuieTek	HCP AL50	N/A	N/A
Vertical Coupling Plane (VCP)	QuieTek	VCP AL50	N/A	N/A

Radiated susceptibility/ CB3

Instrument	Manufacturer	Model No.	Serial No.	Next Cal. Date
Field strength Meter	WG	EMR-20C	080938-05	2014/08/19
Power Sensor	Boonton	51011-EMC	31507	2014/07/28
Power Sensor	Boonton	51011-EMC	34359	2014/07/28
RF Power Meter	Boonton	4232A	42201	2014/07/28
Signal Generator	R&S	SML03	103300	2014/04/24
Bilog Antenna	FRANKONIA	BTA-M	06001M	N/A
Horn Antenna	Schwarzbeck	BBHA 9120E	286	N/A
Directional Coupler	WERLATONE	C6021	28565	N/A
Directional Coupler	WERLATONE	C6187	28590	N/A
Power Amplifier	FRANKONIA	FLH200B	1022	N/A
Power Amplifier	FRANKONIA	FLG-50C	1009	N/A

Electrical fast transient/ Burst/ SR1

Instrument	Manufacturer	Model No.	Serial No.	Next Cal. Date
Clamper	HAEFELY	093 506.1	083 593-23	2014/07/25
EMC Immunity Tester	EMC-PARTNER	Transient-2000	984	2014/01/29

Surge/ SR1

Instrument	Manufacturer	Model No.	Serial No.	Next Cal. Date
Coupling Network	EM TEST	CNV 504	0503-05	2013/12/12
Ultra Compact Generator	EM TEST	UCS 500-M4	1198-34	2014/07/25
Surge Tester	TESEQ	NSG 3060	1424	2014/06/25
Coupling Network	TESEQ	INA 172	SL 403-109	2014/05/21

Conducted susceptibility/ SR4

Instrument	Manufacturer	Model No.	Serial No.	Next Cal. Date
Attenuator	Schaffner	INA2070-1	2112	N/A
CDN	Schaffner	CDN M016	16337	2014/03/06
CDN	Schaffner	CDN T400	16905	2014/03/06
CDN	COM-POWER	CDN T8	711899	2014/03/06
Immunity Injection Clamp	Schaffner	KEMZ801	15928	2014/03/06
RF-Synthesizer/Amplifier	Schaffner	NSG 2070-1	1112	2014/02/28

Power frequency magnetic field/ SR1

Instrument	Manufacturer	Model No.	Serial No.	Next Cal. Date
Magnetic Field Testing	Haefely	MAG100	080 938-05	2013/11/11
Triaxial ELF Magnetic Field Meter	F.B.BELL	4090	9852	2014/09/11

Voltage dips and interruption/ SR1

Instrument	Manufacturer	Model No.	Serial No.	Next Cal. Date
Ultra Compact Generator	EM TEST	UCS 500-M4	1198-34	2014/07/25

2.3. Measurement Uncertainty

Conducted Emission

The measurement uncertainty is evaluated as ± 2.26 dB.

Radiated Emission (Under 1GHz)

The measurement uncertainty is evaluated as ± 3.43 dB.

Radiated Emission (Above 1GHz)

The measurement uncertainty is evaluated as ± 3.65 dB.

Harmonic Current Emission

The measurement uncertainty is evaluated as 0.1%.

Voltage Fluctuation and Flicker

The measurement uncertainty is evaluated as ±4%.

Electrostatic Discharge

As what is concluded in the document from Note2 of clause 5.4.6.2 of ISO/IEC 17025: 1999[2], the requirements for measurement uncertainty in ESD testing are deemed to have been satisfied, and the testing is reported in accordance with the relevant ESD standards. The immunity test signal from the ESD system meet the required specifications in IEC 61000-4-2 through the calibration report with the calibrated uncertainty for the waveform of voltage and timing as being 1.63 %*10^{-10} and 2.76%.

Radiated susceptibility

As what is concluded in the document from Note2 of clause 5.4.6.2 of ISO/IEC 17025: 1999[2], the requirements for measurement uncertainty in RS testing are deemed to have been satisfied, and the testing is reported in accordance with the relevant RS standards. The immunity test signal from the RS system meet the required specifications in IEC 61000-4-3 through the calibration for the uniform field strength and monitoring for the test level with the uncertainty evaluation report for the electrical filed strength as being 2.72 dB.

Electrical fast transient/burst

As what is concluded in the document from Note2 of clause 5.4.6.2 of ISO/IEC 17025: 1999[2], the requirements for measurement uncertainty in EFT/Burst testing are deemed to have been satisfied, and the testing is reported in accordance with the relevant EFT/Burst standards. The immunity test signal from the EFT/Burst system meet the required specifications in IEC 61000-4-4 through the calibration report with the calibrated uncertainty for the waveform of voltage, frequency and timing as being 1.63 %, 2.8 x 10^{-10} and 2.76%

Surge

As what is concluded in the document from Note2 of clause 5.4.6.2 of ISO/IEC 17025: 1999[2], the requirements for measurement uncertainty in Surge testing are deemed to have been satisfied, and the testing is reported in accordance with the relevant Surge standards. The immunity test signal from the Surge system meet the required specifications in IEC 61000-4-5 through the calibration report with the calibrated uncertainty for the waveform of voltage and timing as being 1.63 %*10^{-10} and 2.76%.

Conducted susceptibility

As what is concluded in the document from Note2 of clause 5.4.6.2 of ISO/IEC 17025: 1999[2], the requirements for measurement uncertainty in CS testing are deemed to have been satisfied, and the testing is reported in accordance with the relevant CS standards. The immunity test signal from the CS system meet the required specifications in IEC 61000-4-6 through the calibration for unmodulated signal and monitoring for the test level with the uncertainty evaluation report for the injected modulated signal level through CDN and EM Clamp/Direct Injection as being 3.72 dB and 2.78 dB.

Power frequency magnetic field

As what is concluded in the document from Note2 of clause 5.4.6.2 of ISO/IEC 17025: 1999[2], the requirements for measurement uncertainty in PFM testing are deemed to have been satisfied, and the testing is reported in accordance with the relevant PFM standards. The immunity test signal from the PFM system meet the required specifications in IEC 61000-4-8 through the calibration report with the calibrated uncertainty for the Gauss Meter to verify the output level of magnetic field strength as being 2 %.

Voltage dips and interruption

As what is concluded in the document from Note2 of clause 5.4.6.2 of ISO/IEC 17025: 1999[2], the requirements for measurement uncertainty in DIP testing are deemed to have been satisfied, and the testing is reported in accordance with the relevant DIP standards. The immunity test signal from the DIP system meet the required specifications in IEC 61000-4-11 through the calibration report with the calibrated uncertainty for the waveform of voltage and timing as being 1.63 %*10^{-10} and 2.76%.

2.4. Test Environment

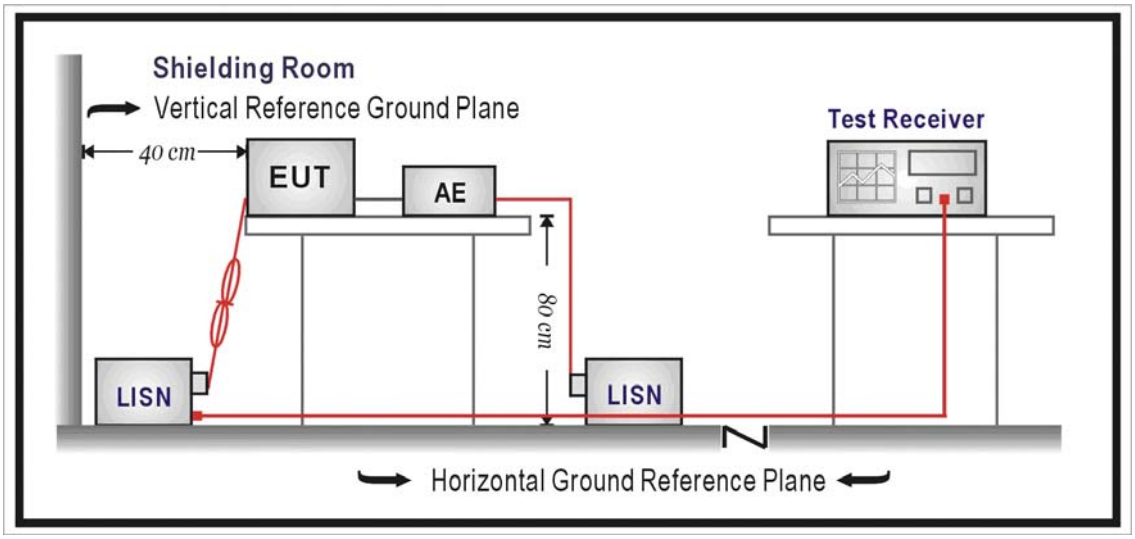
Performed Item	Items	Required	Actual
Conducted Emission	Temperature (°C)	15-35	25
	Humidity (%RH)	25-75	50
	Barometric pressure (mbar)	860-1060	950-1000
Radiated Emission	Temperature (°C)	15-35	25
	Humidity (%RH)	25-75	65
	Barometric pressure (mbar)	860-1060	950-1000
Power Harmonics	Temperature (°C)	15-35	25
	Humidity (%RH)	25-75	50
	Barometric pressure (mbar)	860-1060	950-1000
Voltage Fluctuation and Flicker	Temperature (°C)	15-35	25
	Humidity (%RH)	25-75	50
	Barometric pressure (mbar)	860-1060	950-1000
Electrostatic Discharge	Temperature (°C)	15-35	23
	Humidity (%RH)	30-60	52
	Barometric pressure (mbar)	860-1060	950-1000
Radiated susceptibility	Temperature (°C)	15-35	22
	Humidity (%RH)	25-75	51
	Barometric pressure (mbar)	860-1060	950-1000
Electrical fast transient/burst	Temperature (°C)	15-35	22
	Humidity (%RH)	25-75	53
	Barometric pressure (mbar)	860-1060	950-1000
Surge	Temperature (°C)	15-35	23
	Humidity (%RH)	10-75	52
	Barometric pressure (mbar)	860-1060	950-1000
Conducted susceptibility	Temperature (°C)	15-35	24
	Humidity (%RH)	25-75	50
	Barometric pressure (mbar)	860-1060	950-1000
Power frequency magnetic field	Temperature (°C)	15-35	21
	Humidity (%RH)	25-75	51
	Barometric pressure (mbar)	860-1060	950-1000
Voltage dips and interruption	Temperature (°C)	15-35	21
	Humidity (%RH)	25-75	51
	Barometric pressure (mbar)	860-1060	950-1000

3. Conducted Emission (Main Terminals)

3.1. Test Specification

According to EMC Standard : EN 55022, ETSI EN 301 489-1

3.2. Test Setup



3.3. Limit

Limits		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
0.15 - 0.50	66 - 56	56 – 46
0.50-5.0	56	46
5.0 - 30	60	50

Remarks: In the above table, the tighter limit applies at the band edges.

3.4. Test Procedure

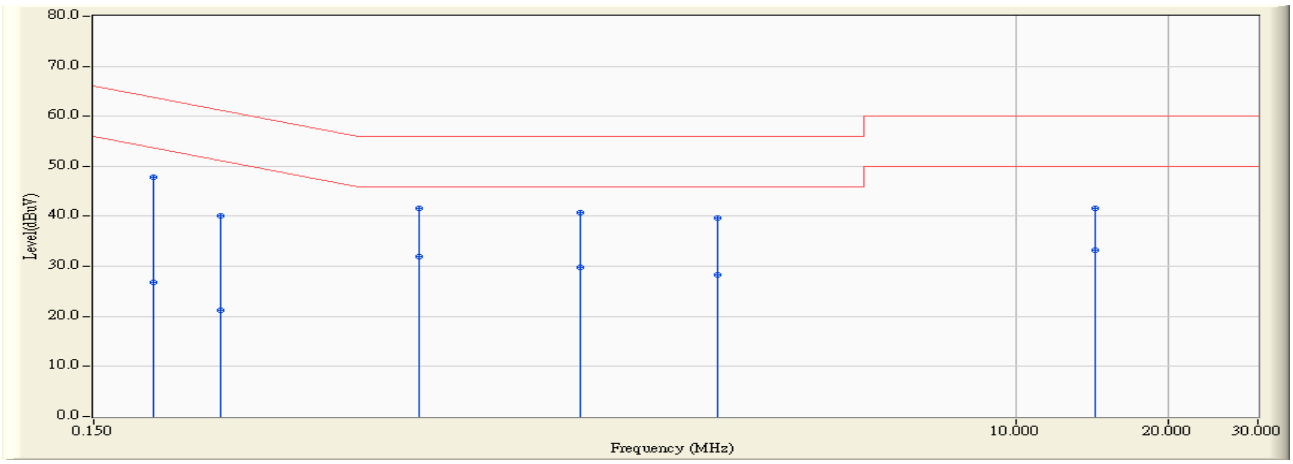
The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination.
(Please refers to the block diagram of the test setup and photographs.)
Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed on conducted measurement.
Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

3.5. Deviation from Test Standard

No deviation.

3.6. Test Result

Site : SR3	**Time : 2013/09/04 - 19:15**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR3_LISN(16A)-3_0813 - Line1	**Power : AC 230V/50Hz**
EUT : Scanner	**Note : Mode 3: Read**

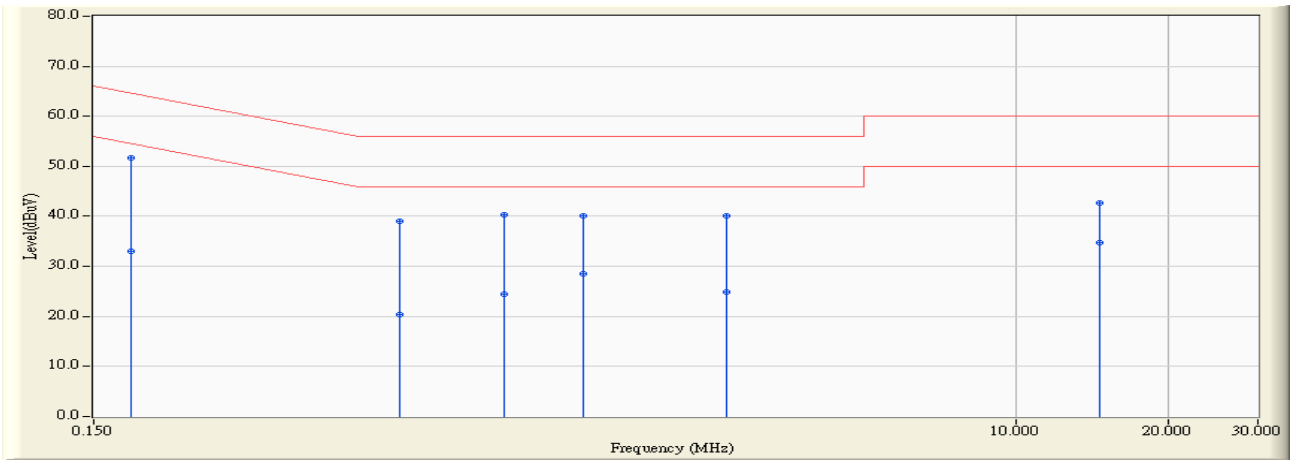


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.197	9.655	38.140	47.795	-15.946	63.741	QUASIPEAK
2		0.197	9.655	17.050	26.705	-27.036	53.741	AVERAGE
3		0.267	9.696	30.490	40.186	-21.019	61.205	QUASIPEAK
4		0.267	9.696	11.560	21.256	-29.949	51.205	AVERAGE
5		0.662	9.860	31.730	41.590	-14.410	56.000	QUASIPEAK
6	*	0.662	9.860	22.070	31.930	-14.070	46.000	AVERAGE
7		1.377	9.950	30.830	40.780	-15.220	56.000	QUASIPEAK
8		1.377	9.950	19.930	29.880	-16.120	46.000	AVERAGE
9		2.568	9.990	29.720	39.710	-16.290	56.000	QUASIPEAK
10		2.568	9.990	18.240	28.230	-17.770	46.000	AVERAGE
11		14.353	10.130	31.470	41.600	-18.400	60.000	QUASIPEAK
12		14.353	10.130	23.200	33.330	-16.670	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : SR3	**Time : 2013/09/04 - 19:17**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR3_LISN(16A)-3_0813 - Line2	**Power : AC 230V/50Hz**
EUT : Scanner	**Note : Mode 3: Read**

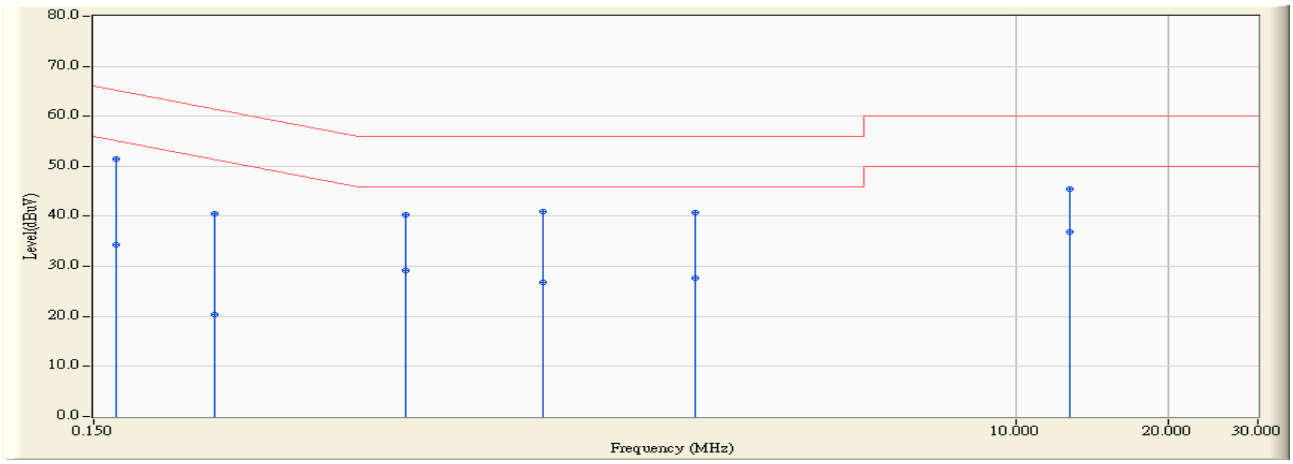


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.177	9.646	41.960	51.606	-13.003	64.609	QUASIPEAK
2		0.177	9.646	23.300	32.946	-21.663	54.609	AVERAGE
3		0.603	9.840	29.100	38.940	-17.060	56.000	QUASIPEAK
4		0.603	9.840	10.580	20.420	-25.580	46.000	AVERAGE
5		0.974	9.922	30.370	40.292	-15.708	56.000	QUASIPEAK
6		0.974	9.922	14.610	24.532	-21.468	46.000	AVERAGE
7		1.388	9.930	30.160	40.090	-15.910	56.000	QUASIPEAK
8		1.388	9.930	18.560	28.490	-17.510	46.000	AVERAGE
9		2.677	9.970	30.040	40.010	-15.990	56.000	QUASIPEAK
10		2.677	9.970	14.990	24.960	-21.040	46.000	AVERAGE
11		14.619	10.210	32.440	42.650	-17.350	60.000	QUASIPEAK
12		14.619	10.210	24.530	34.740	-15.260	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : SR3	**Time : 2013/09/04 - 19:28**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR3_LISN(16A)-3_0813 - Line1	**Power : AC 230V/50Hz**
EUT : Scanner	**Note : Mode 4: Scan to PC**

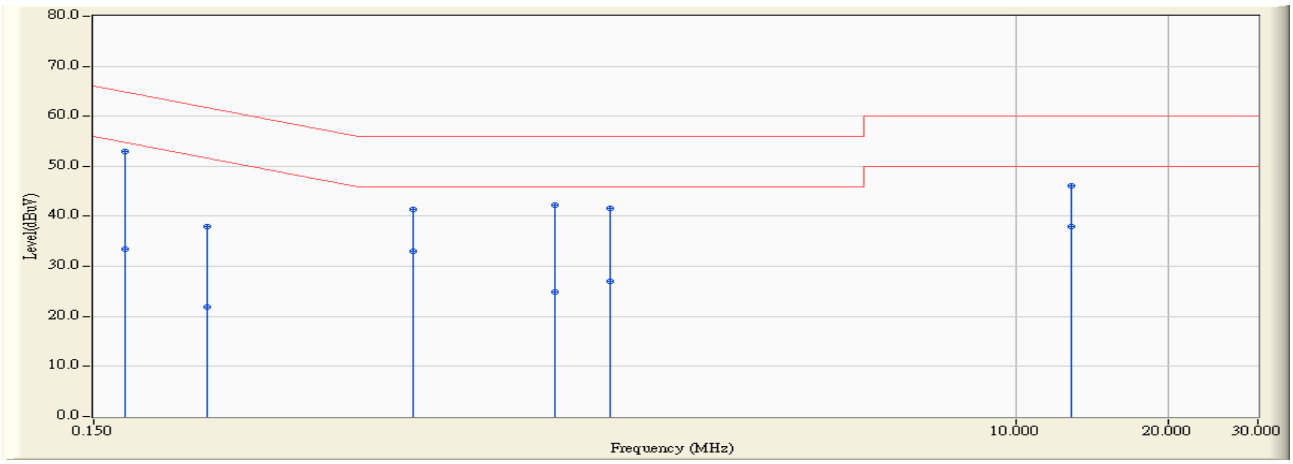


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.166	9.642	41.790	51.432	-13.745	65.177	QUASIPEAK
2		0.166	9.642	24.710	34.352	-20.825	55.177	AVERAGE
3		0.259	9.693	30.840	40.533	-20.918	61.451	QUASIPEAK
4		0.259	9.693	10.580	20.273	-31.178	51.451	AVERAGE
5		0.619	9.853	30.440	40.293	-15.707	56.000	QUASIPEAK
6		0.619	9.853	19.360	29.213	-16.787	46.000	AVERAGE
7		1.158	9.940	31.110	41.050	-14.950	56.000	QUASIPEAK
8		1.158	9.940	16.770	26.710	-19.290	46.000	AVERAGE
9		2.322	9.980	30.870	40.850	-15.150	56.000	QUASIPEAK
10		2.322	9.980	17.670	27.650	-18.350	46.000	AVERAGE
11		12.732	10.120	35.300	45.420	-14.580	60.000	QUASIPEAK
12	*	12.732	10.120	26.750	36.870	-13.130	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : SR3	**Time : 2013/09/04 - 19:30**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR3_LISN(16A)-3_0813 - Line2	**Power : AC 230V/50Hz**
EUT : Scanner	**Note : Mode 4: Scan to PC**

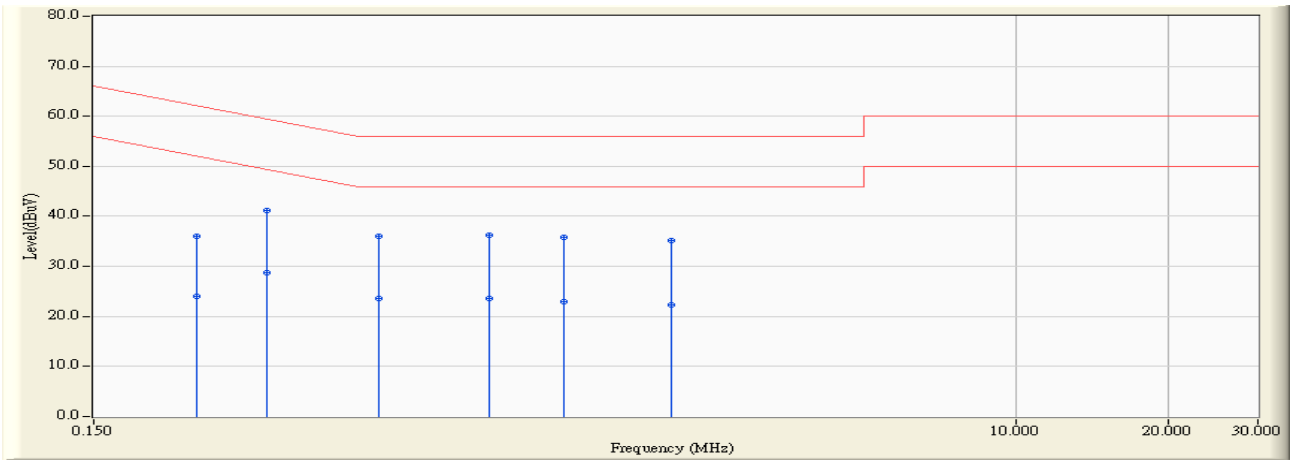


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.173	9.645	43.430	53.075	-11.719	64.794	QUASIPEAK
2		0.173	9.645	23.880	33.525	-21.269	54.794	AVERAGE
3		0.252	9.691	28.190	37.881	-23.825	61.705	QUASIPEAK
4		0.252	9.691	12.120	21.811	-29.895	51.705	AVERAGE
5		0.642	9.850	31.480	41.330	-14.670	56.000	QUASIPEAK
6		0.642	9.850	23.160	33.010	-12.990	46.000	AVERAGE
7		1.224	9.930	32.220	42.150	-13.850	56.000	QUASIPEAK
8		1.224	9.930	14.970	24.900	-21.100	46.000	AVERAGE
9		1.572	9.940	31.710	41.650	-14.350	56.000	QUASIPEAK
10		1.572	9.940	17.030	26.970	-19.030	46.000	AVERAGE
11		12.853	10.180	35.860	46.040	-13.960	60.000	QUASIPEAK
12		12.853	10.180	27.860	38.040	-11.960	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : SR3	**Time : 2013/09/04 - 17:19**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR3_LISN(16A)-3_0813 - Line1	**Power : AC 230V/50Hz**
EUT : Scanner	**Note : Mode 5: Charge**

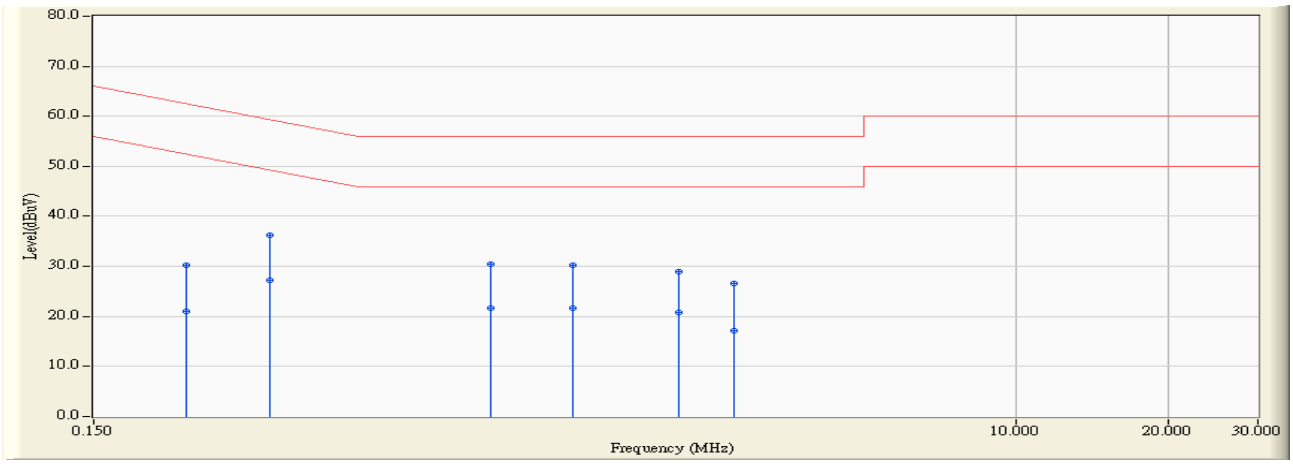


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.240	9.684	26.330	36.014	-26.088	62.102	QUASIPEAK
2		0.240	9.684	14.250	23.934	-28.168	52.102	AVERAGE
3	*	0.330	9.734	31.430	41.164	-18.295	59.459	QUASIPEAK
4		0.330	9.734	19.060	28.794	-20.665	49.459	AVERAGE
5		0.548	9.840	26.150	35.990	-20.010	56.000	QUASIPEAK
6		0.548	9.840	13.850	23.690	-22.310	46.000	AVERAGE
7		0.908	9.920	26.330	36.250	-19.750	56.000	QUASIPEAK
8		0.908	9.920	13.760	23.680	-22.320	46.000	AVERAGE
9		1.275	9.950	25.790	35.740	-20.260	56.000	QUASIPEAK
10		1.275	9.950	13.020	22.970	-23.030	46.000	AVERAGE
11		2.076	9.960	25.190	35.150	-20.850	56.000	QUASIPEAK
12		2.076	9.960	12.410	22.370	-23.630	46.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : SR3	**Time : 2013/09/04 - 17:20**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR3_LISN(16A)-3_0813 - Line2	**Power : AC 230V/50Hz**
EUT : Scanner	**Note : Mode 5: Charge**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.228	9.676	20.460	30.136	-32.382	62.518	QUASIPEAK
2		0.228	9.676	11.440	21.116	-31.402	52.518	AVERAGE
3		0.334	9.726	26.570	36.296	-23.065	59.361	QUASIPEAK
4	*	0.334	9.726	17.600	27.326	-22.035	49.361	AVERAGE
5		0.916	9.912	20.650	30.562	-25.438	56.000	QUASIPEAK
6		0.916	9.912	11.840	21.752	-24.248	46.000	AVERAGE
7		1.330	9.930	20.390	30.320	-25.680	56.000	QUASIPEAK
8		1.330	9.930	11.800	21.730	-24.270	46.000	AVERAGE
9		2.146	9.943	18.920	28.863	-27.137	56.000	QUASIPEAK
10		2.146	9.943	10.760	20.703	-25.297	46.000	AVERAGE
11		2.767	9.980	16.550	26.530	-29.470	56.000	QUASIPEAK
12		2.767	9.980	7.250	17.230	-28.770	46.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

3.7 Test Photograph

Test Mode : Mode 3: Read

Description : Front View of Conducted Emission Test Setup

Test Mode : Mode 3: Read

Description : Back View of Conducted Emission Test Setup

Test Mode　: Mode 4: Scan to PC

Description　: Front View of Conducted Emission Test Setup

Test Mode　: Mode 4: Scan to PC

Description　: Back View of Conducted Emission Test Setup

Test Mode : Mode 5: Charge

Description : Front View of Conducted Emission Test Setup

Test Mode : Mode 5: Charge

Description : Back View of Conducted Emission Test Setup

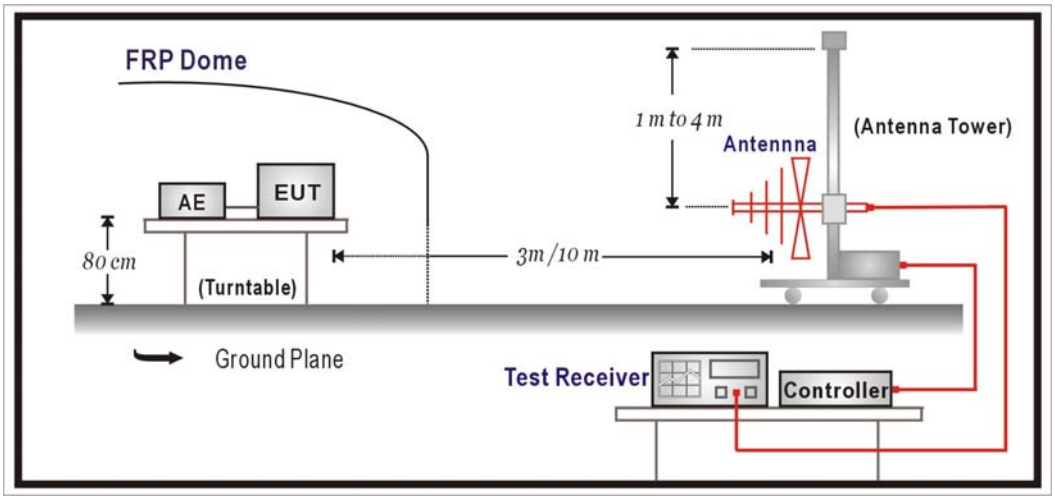
4. Radiated Emission

4.1. Test Specification

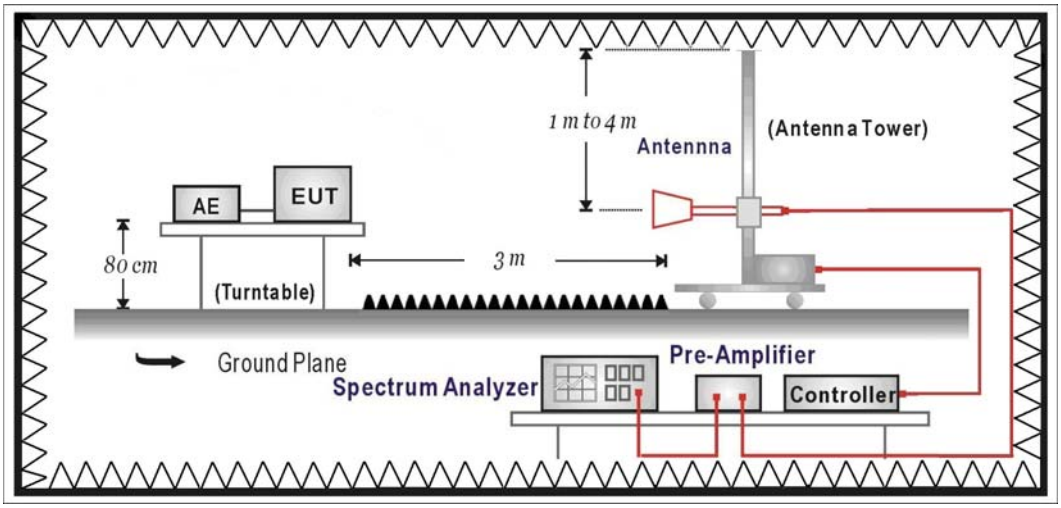
According to EMC Standard : EN 55022, ETSI EN 301 489-1

4.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Limit

Limits		
Frequency (MHz)	Distance (m)	dBuV/m
30 – 230	10	30
230 – 1000	10	37

Limits			
Frequency (MHz)	Distance (m)	Peak (dBuV/m)	Average (dBuV/m)
1000 – 3000	3	70	50
3000 – 6000	3	74	54

Remark:

1. The tighter limit shall apply at the edge between two frequency bands.
2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
3. RF Voltage (dBuV/m) = 20 log RF Voltage (uV/m)

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 108	1000
108 – 500	2000
500 – 1000	5000
Above 1000	5^{th} harmonic of the highest frequency or 6 GHz, whichever is lower

4.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 10 meters. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.
All cable leaving the table-top EUT for a connection outsidethe test site (for example, mains cable, telephone lines, connections to auxiliary equipment located outside the test area) shall be fitted with ferrite clamps placed on the floor at the point where the cable reached the floor.

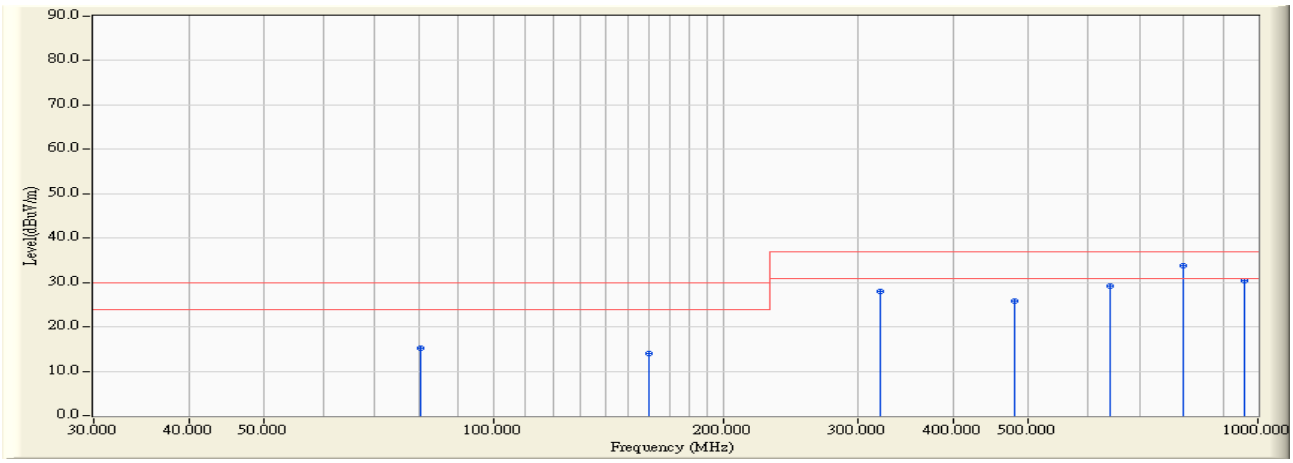
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated on radiated measurement.
Radiated emissions were invested over the frequency range from 30MHz to1GHz using a receiver bandwidth of 120kHz. Radiated was performed at an antenna to EUT distance of 10 meters.
Radiated emissions were invested over the frequency range from 1GHz to 6GHz using a receiver bandwidth of 1MHz. Radiated was performed at an antenna to EUT distance of 3 meters.

4.5. Deviation from Test Standard

No deviation.

4.6. Test Result

Site : Site2	**Time : 2013/08/23 - 10:55**
Limit : CISPR_B_10M_QP	**Margin : 6**
Probe : SITE2_10M-3_0426 - HORIZONTAL	**Power : DC3.7V (Power by battery)**
EUT : Scanner	**Note : Mode 1: Scan to SD**

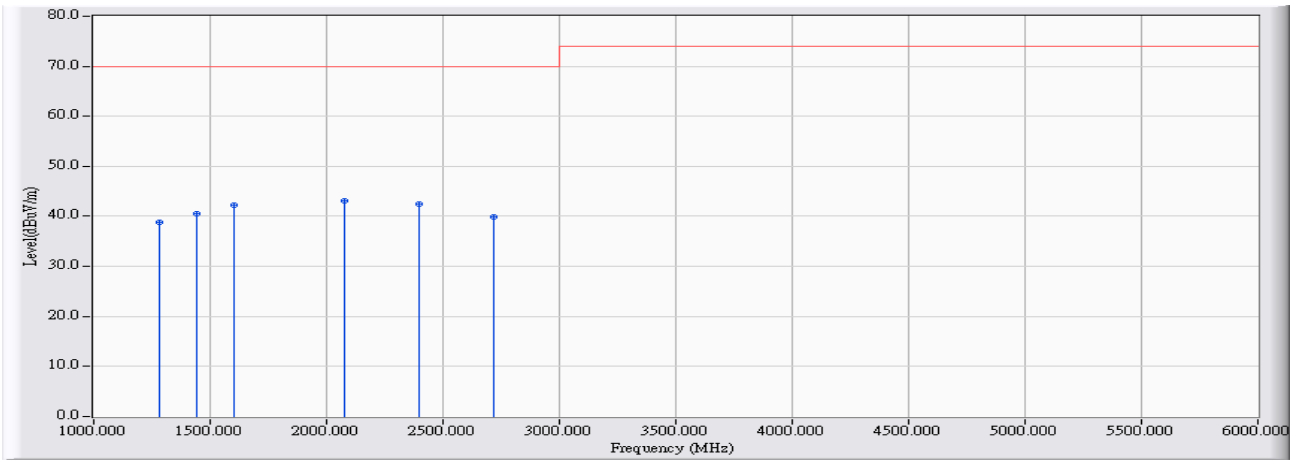


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		80.375	11.159	3.930	15.089	-14.911	30.000	QUASIPEAK
2		160.000	13.675	0.300	13.975	-16.025	30.000	QUASIPEAK
3		320.025	17.977	9.960	27.937	-9.063	37.000	QUASIPEAK
4		480.050	22.528	3.400	25.928	-11.072	37.000	QUASIPEAK
5		640.050	25.403	3.900	29.303	-7.697	37.000	QUASIPEAK
6	*	800.075	27.880	6.000	33.880	-3.120	37.000	QUASIPEAK
7		960.010	30.240	0.200	30.440	-6.560	37.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB1	**Time : 2013/08/27 - 13:55**
Limit : CISPR_22_B_(Above_1G)_3M_PK	**Margin : 0**
Probe : CB1_CISPR_22_B(above1G)-1_0901 - HORIZONTAL	**Power : DC3.7V (Power by battery)**
EUT : Scanner	**Note : Mode 1: Scan to SD**

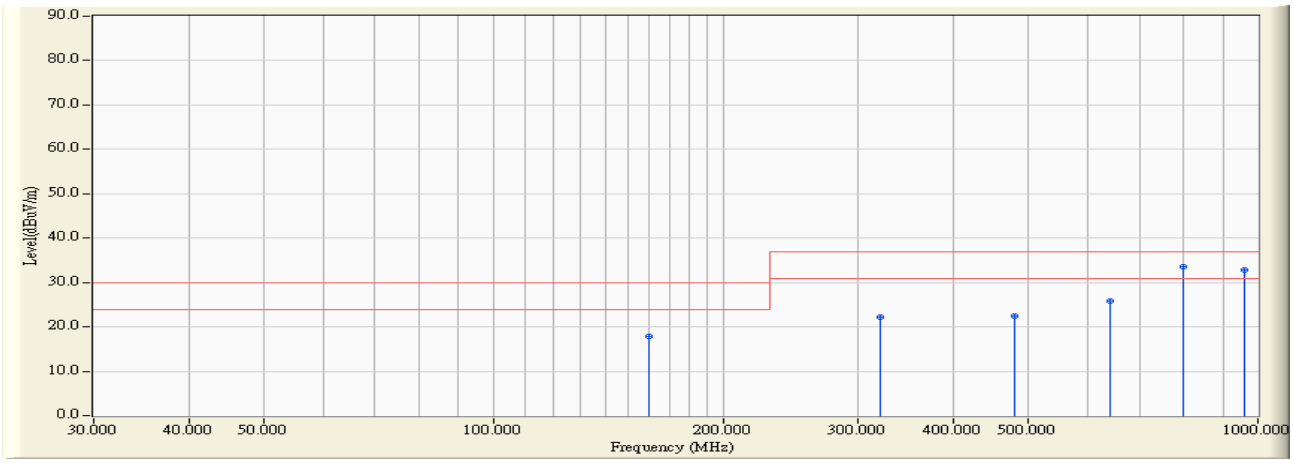


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1280.000	-8.043	46.905	38.862	-31.138	70.000	PEAK
2		1440.000	-7.361	47.946	40.585	-29.415	70.000	PEAK
3		1600.000	-6.756	48.958	42.202	-27.798	70.000	PEAK
4	*	2080.000	-5.133	48.203	43.070	-26.930	70.000	PEAK
5		2400.000	-4.305	46.820	42.515	-27.485	70.000	PEAK
6		2720.000	-3.155	43.100	39.945	-30.055	70.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site2	**Time : 2013/08/23 - 10:53**
Limit : CISPR_B_10M_QP	**Margin : 6**
Probe : SITE2_10M-3_0426 - VERTICAL	**Power : DC3.7V (Power by battery)**
EUT : Scanner	**Note : Mode 1: Scan to SD**

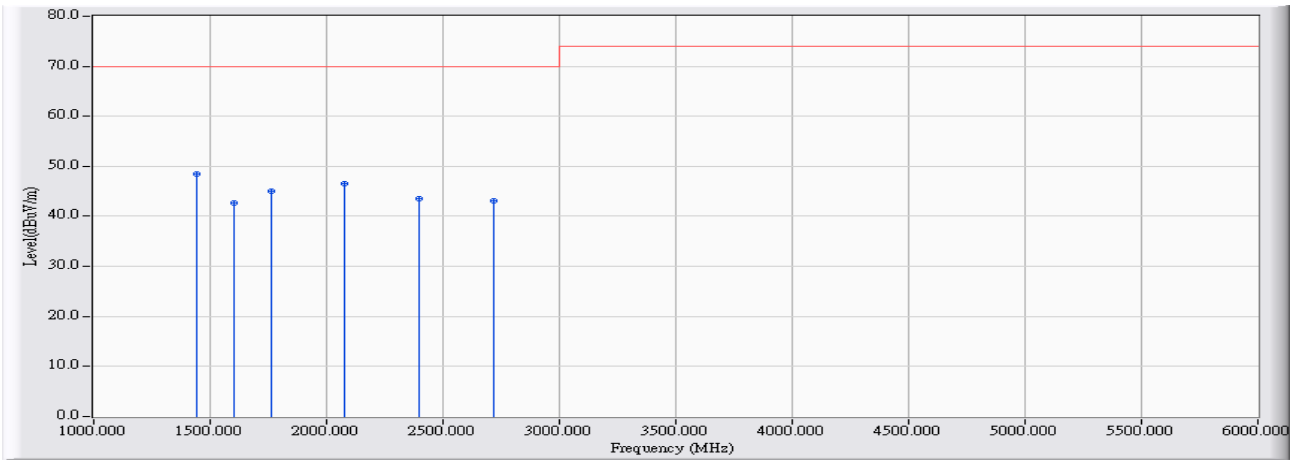


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		160.000	13.675	4.100	17.775	-12.225	30.000	QUASIPEAK
2		320.025	17.977	4.280	22.257	-14.743	37.000	QUASIPEAK
3		480.050	22.528	0.000	22.528	-14.472	37.000	QUASIPEAK
4		640.050	25.403	0.520	25.923	-11.077	37.000	QUASIPEAK
5	*	800.078	27.880	5.760	33.640	-3.360	37.000	QUASIPEAK
6		960.095	31.201	1.500	32.700	-4.300	37.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB1	**Time : 2013/08/27 - 13:48**
Limit : CISPR_22_B_(Above_1G)_3M_PK	**Margin : 0**
Probe : CB1_CISPR_22_B(above1G)-1_0901 - VERTICAL	**Power : DC3.7V (Power by battery)**
EUT : Scanner	**Note : Mode 1: Scan to SD**

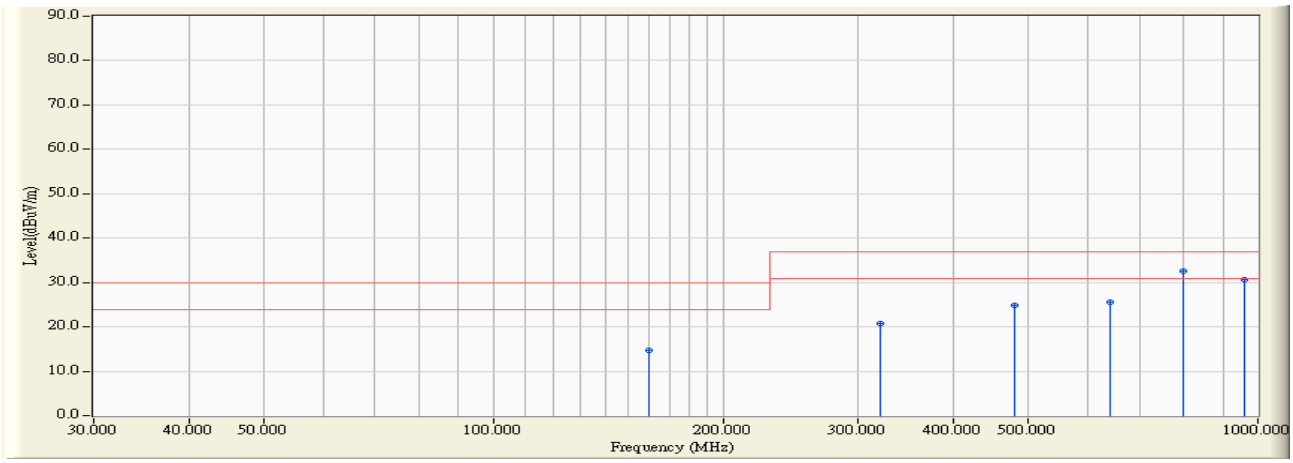


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	1440.000	-7.361	55.821	48.460	-21.540	70.000	PEAK
2		1600.000	-6.756	49.486	42.730	-27.270	70.000	PEAK
3		1760.000	-6.193	51.259	45.066	-24.934	70.000	PEAK
4		2080.000	-5.133	51.742	46.609	-23.391	70.000	PEAK
5		2400.000	-4.305	47.904	43.599	-26.401	70.000	PEAK
6		2720.000	-3.155	46.209	43.054	-26.946	70.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site2	**Time : 2013/08/23 - 14:23**
Limit : CISPR_B_10M_QP	**Margin : 6**
Probe : SITE2_10M-3_0426 - HORIZONTAL	**Power : DC3.7V (Power by battery)**
EUT : Scanner	**Note : Mode 2: WiFi**

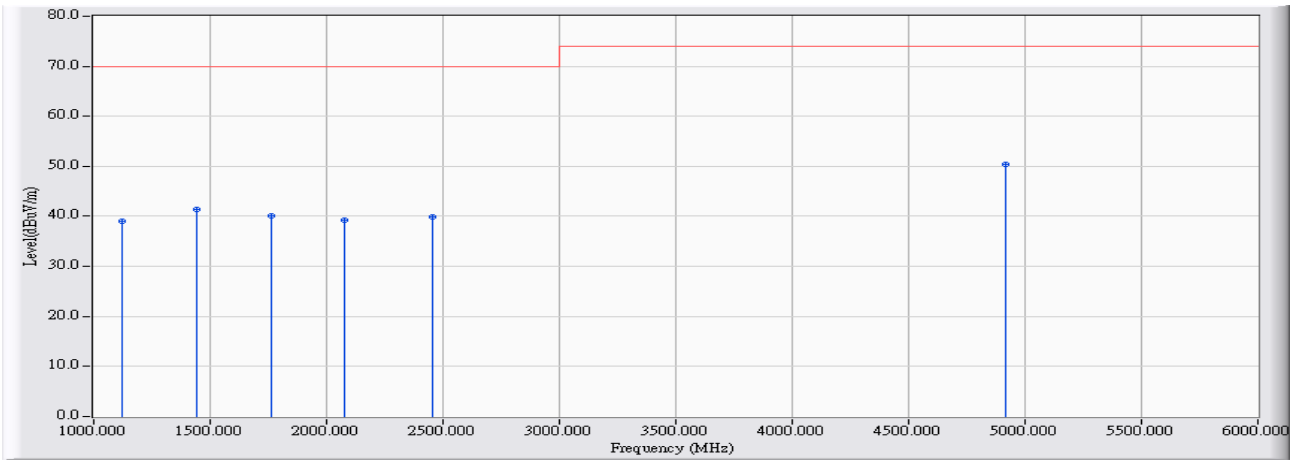


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		160.000	13.675	1.100	14.775	-15.225	30.000	QUASIPEAK
2		320.000	17.976	2.840	20.816	-16.184	37.000	QUASIPEAK
3		480.050	22.528	2.240	24.768	-12.232	37.000	QUASIPEAK
4		640.050	25.403	0.200	25.603	-11.397	37.000	QUASIPEAK
5	*	800.075	27.880	4.720	32.600	-4.400	37.000	QUASIPEAK
6		960.100	30.240	0.500	30.740	-6.260	37.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB1	**Time : 2013/08/27 - 14:11**
Limit : CISPR_22_B_(Above_1G)_3M_PK	**Margin : 0**
Probe : CB1_CISPR_22_B(above1G)-1_0901 - HORIZONTAL	**Power : DC3.7V (Power by battery)**
EUT : Scanner	**Note : Mode 2: WiFi**

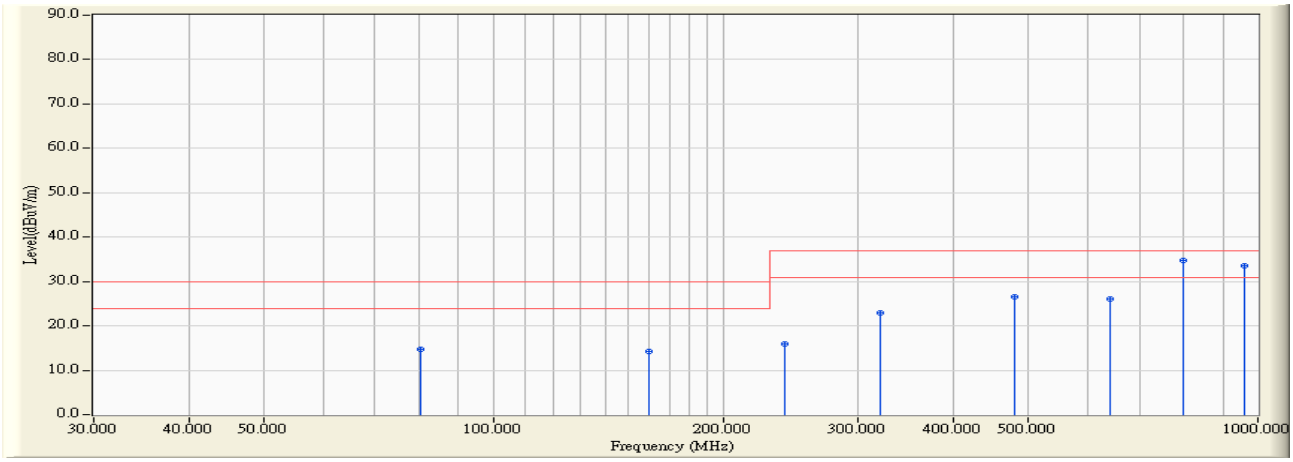


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1120.000	-8.724	47.768	39.044	-30.956	70.000	PEAK
2		1440.000	-7.361	48.657	41.296	-28.704	70.000	PEAK
3		1760.000	-6.193	46.209	40.016	-29.984	70.000	PEAK
4		2080.000	-5.133	44.377	39.244	-30.756	70.000	PEAK
5		2455.000	-4.163	44.061	39.898	-30.102	70.000	PEAK
6	*	4915.000	2.486	48.010	50.496	-23.504	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site2	**Time : 2013/08/23 - 13:18**
Limit : CISPR_B_10M_QP	**Margin : 6**
Probe : SITE2_10M-3_0426 - VERTICAL	**Power : DC3.7V (Power by battery)**
EUT : Scanner	**Note : Mode 2: WiFi**

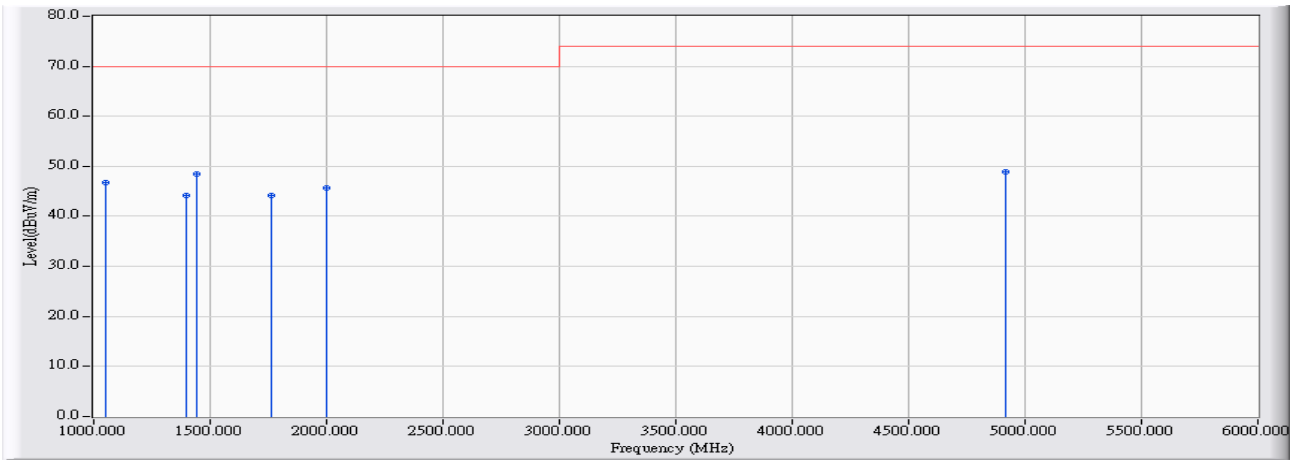


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		80.375	11.159	3.530	14.689	-15.311	30.000	QUASIPEAK
2		160.000	13.675	0.600	14.275	-15.725	30.000	QUASIPEAK
3		240.000	15.670	0.300	15.970	-21.030	37.000	QUASIPEAK
4		320.025	17.977	4.960	22.937	-14.063	37.000	QUASIPEAK
5		480.050	22.528	4.080	26.608	-10.392	37.000	QUASIPEAK
6		640.050	25.403	0.540	25.943	-11.057	37.000	QUASIPEAK
7	*	800.075	27.880	6.820	34.700	-2.300	37.000	QUASIPEAK
8		960.100	31.201	2.220	33.421	-3.579	37.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB1	**Time : 2013/08/27 - 14:02**
Limit : CISPR_22_B_(Above_1G)_3M_PK	**Margin : 0**
Probe : CB1_CISPR_22_B(above1G)-1_0901 - VERTICAL	**Power : DC3.7V (Power by battery)**
EUT : Scanner	**Note : Mode 2: WiFi**

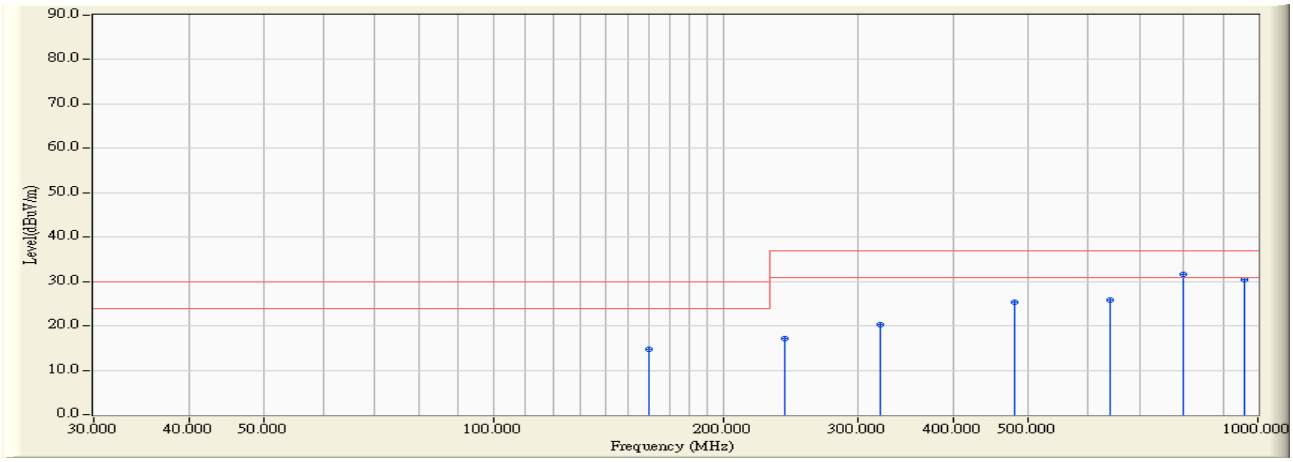


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1050.000	-9.022	55.858	46.836	-23.164	70.000	PEAK
2		1395.000	-7.553	51.812	44.259	-25.741	70.000	PEAK
3	*	1440.000	-7.361	55.892	48.531	-21.469	70.000	PEAK
4		1760.000	-6.193	50.312	44.119	-25.881	70.000	PEAK
5		2000.000	-5.345	51.053	45.709	-24.291	70.000	PEAK
6		4915.000	2.486	46.334	48.820	-25.180	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site2	**Time : 2013/08/23 - 14:24**
Limit : CISPR_B_10M_QP	**Margin : 6**
Probe : SITE2_10M-3_0426 - HORIZONTAL	**Power : AC 230V/50Hz**
EUT : Scanner	**Note : Mode 3: Read**

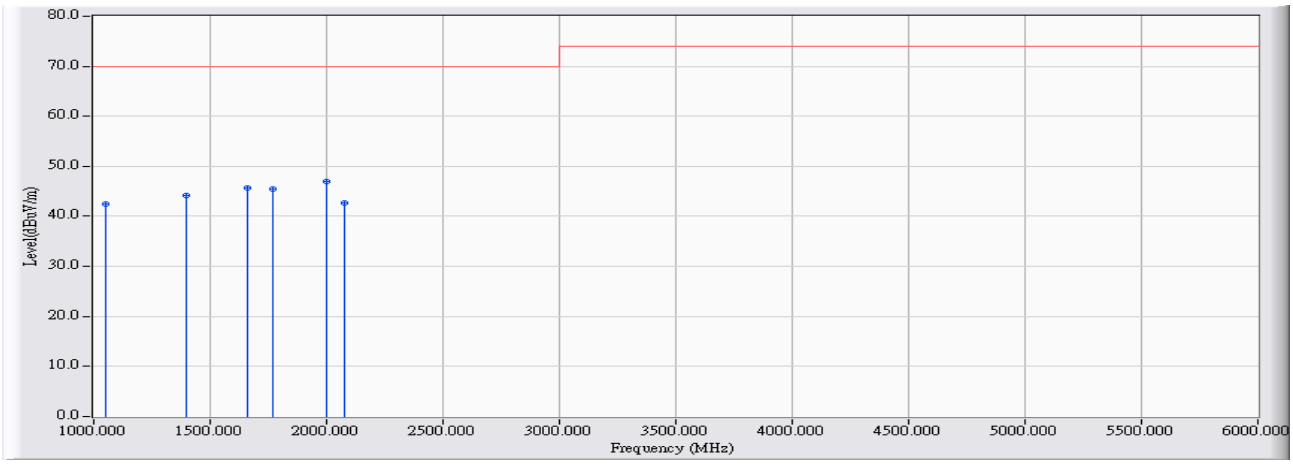


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		160.000	13.675	1.120	14.795	-15.205	30.000	QUASIPEAK
2		240.000	15.670	1.470	17.140	-19.860	37.000	QUASIPEAK
3		320.000	17.976	2.300	20.276	-16.724	37.000	QUASIPEAK
4		480.050	22.528	2.780	25.308	-11.692	37.000	QUASIPEAK
5		640.000	25.402	0.300	25.702	-11.298	37.000	QUASIPEAK
6	*	800.075	27.880	3.640	31.520	-5.480	37.000	QUASIPEAK
7		960.010	30.240	0.200	30.440	-6.560	37.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB1	**Time : 2013/08/27 - 14:30**
Limit : CISPR_22_B_(Above_1G)_3M_PK	**Margin : 0**
Probe : CB1_CISPR_22_B(above1G)-1_0901 - HORIZONTAL	**Power : AC 230V/50Hz**
EUT : Scanner	**Note : Mode 3: Read**

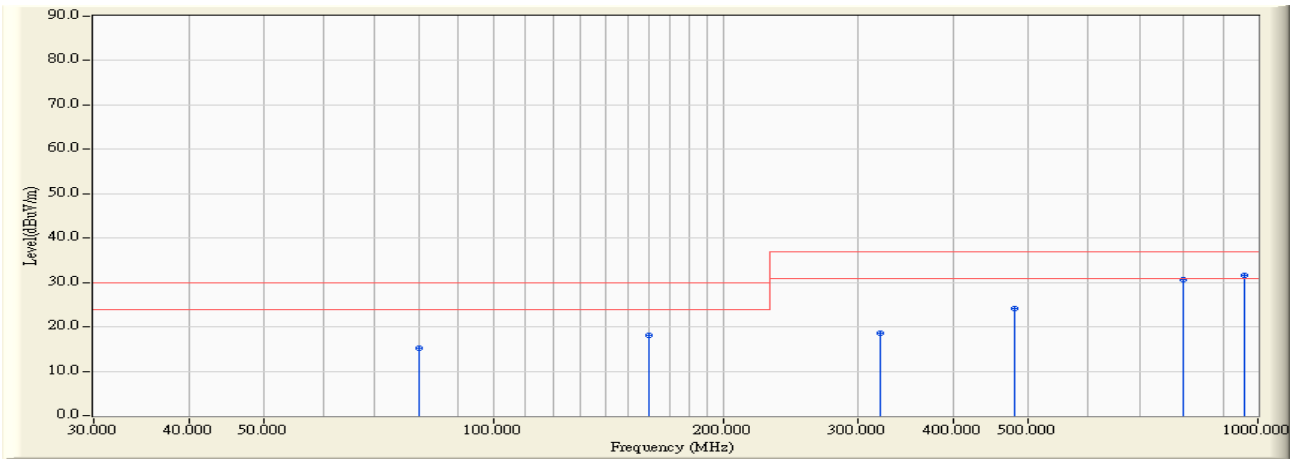


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1050.000	-9.022	51.555	42.533	-27.467	70.000	PEAK
2		1400.000	-7.531	51.608	44.077	-25.923	70.000	PEAK
3		1660.000	-6.545	52.133	45.588	-24.412	70.000	PEAK
4		1770.000	-6.158	51.617	45.459	-24.541	70.000	PEAK
5	*	2000.000	-5.345	52.254	46.910	-23.090	70.000	PEAK
6		2080.000	-5.133	47.791	42.658	-27.342	70.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site2	**Time : 2013/08/23 - 14:23**
Limit : CISPR_B_10M_QP	**Margin : 6**
Probe : SITE2_10M-3_0426 - VERTICAL	**Power : AC 230V/50Hz**
EUT : Scanner	**Note : Mode 3: Read**

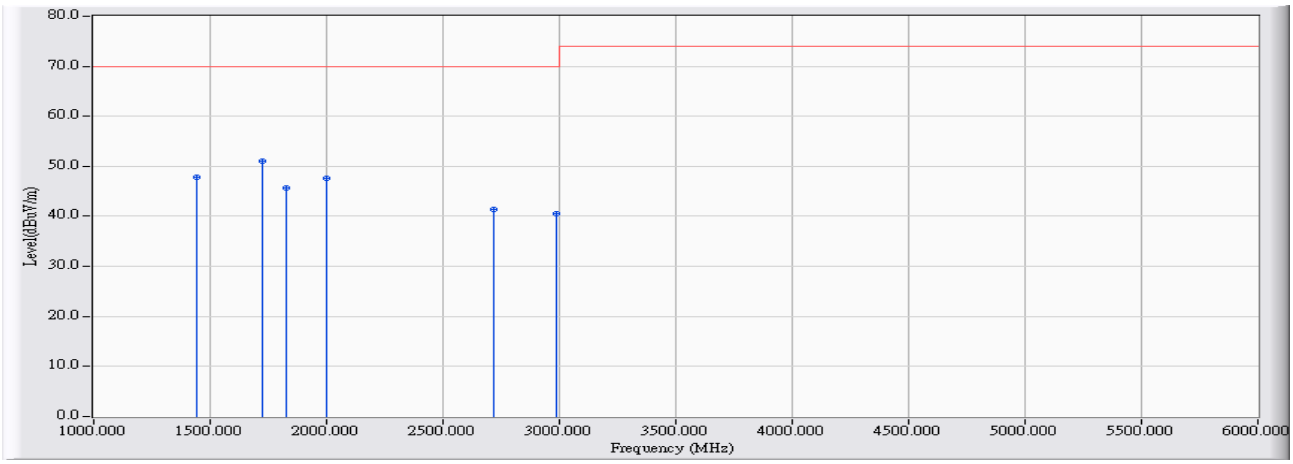


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		79.875	11.073	4.140	15.213	-14.787	30.000	QUASIPEAK
2		160.000	13.675	4.440	18.115	-11.885	30.000	QUASIPEAK
3		320.025	17.977	0.600	18.577	-18.423	37.000	QUASIPEAK
4		480.050	22.528	1.600	24.128	-12.872	37.000	QUASIPEAK
5		800.075	27.880	2.680	30.560	-6.440	37.000	QUASIPEAK
6	*	960.100	31.201	0.340	31.541	-5.459	37.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB1	**Time : 2013/08/27 - 14:21**
Limit : CISPR_22_B_(Above_1G)_3M_PK	**Margin : 0**
Probe : CB1_CISPR_22_B(above1G)-1_0901 - VERTICAL	**Power : AC 230V/50Hz**
EUT : Scanner	**Note : Mode 3: Read**

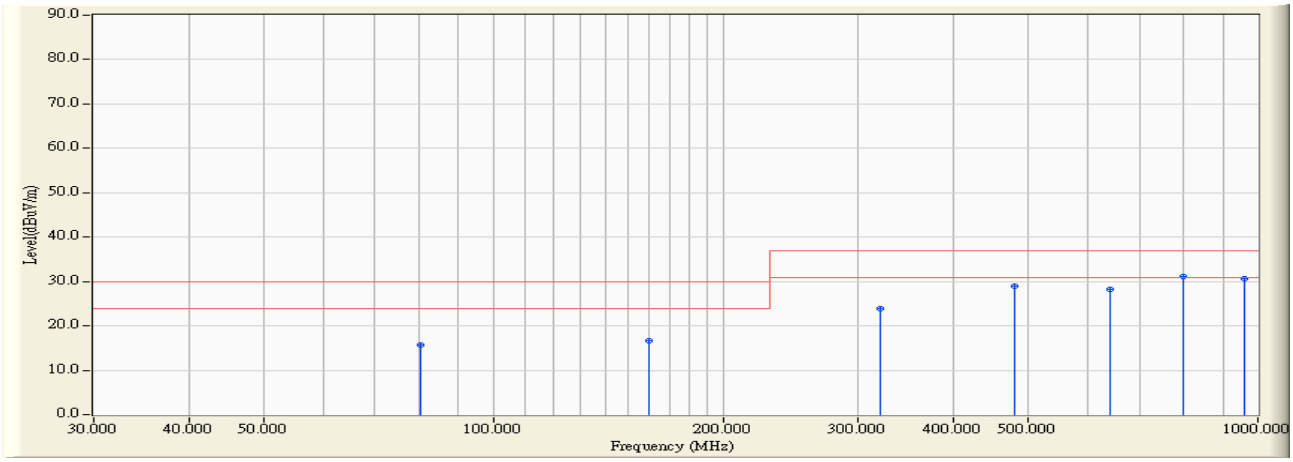


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1440.000	-7.361	55.165	47.804	-22.196	70.000	PEAK
2	*	1725.000	-6.317	57.305	50.988	-19.012	70.000	PEAK
3		1830.000	-5.947	51.565	45.618	-24.382	70.000	PEAK
4		2000.000	-5.345	53.044	47.700	-22.300	70.000	PEAK
5		2720.000	-3.155	44.596	41.441	-28.559	70.000	PEAK
6		2990.000	-2.069	42.644	40.575	-29.425	70.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site2	**Time : 2013/08/23 - 15:39**
Limit : CISPR_B_10M_QP	**Margin : 6**
Probe : SITE2_10M-3_0426 - HORIZONTAL	**Power : AC 230V/50Hz**
EUT : Scanner	**Note : Mode 4: Scan to PC**

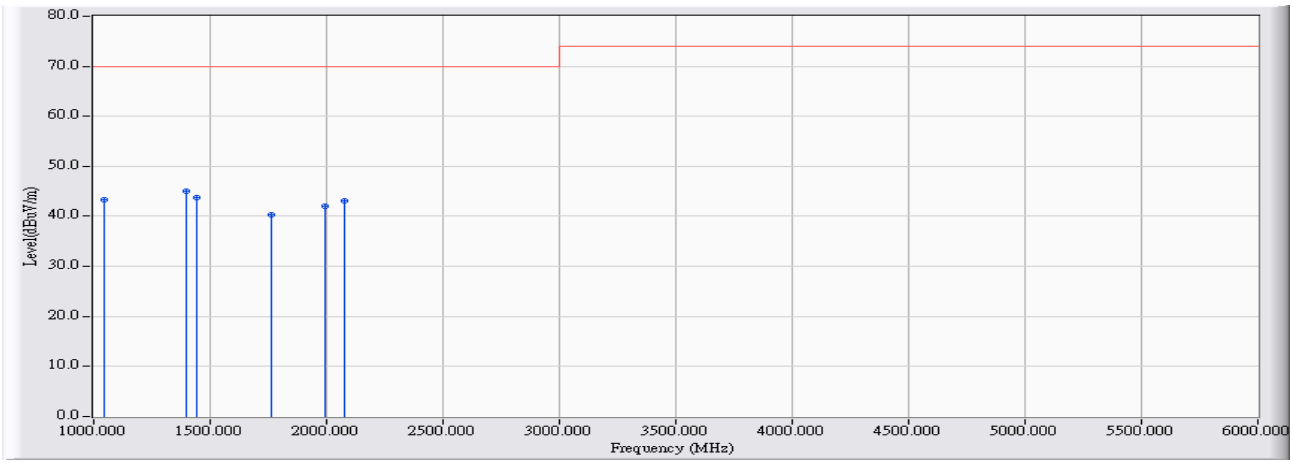


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		80.375	11.159	4.610	15.769	-14.231	30.000	QUASIPEAK
2		160.000	13.675	2.960	16.635	-13.365	30.000	QUASIPEAK
3		320.025	17.977	5.940	23.917	-13.083	37.000	QUASIPEAK
4		480.050	22.528	6.320	28.848	-8.152	37.000	QUASIPEAK
5		640.050	25.403	2.900	28.303	-8.697	37.000	QUASIPEAK
6	*	800.075	27.880	3.180	31.060	-5.940	37.000	QUASIPEAK
7		960.090	30.241	0.300	30.540	-6.460	37.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB1	**Time : 2013/08/27 - 14:42**
Limit : CISPR_22_B_(Above_1G)_3M_PK	**Margin : 0**
Probe : CB1_CISPR_22_B(above1G)-1_0901 - HORIZONTAL	**Power : AC 230V/50Hz**
EUT : Scanner	**Note : Mode 4: Scan to PC**

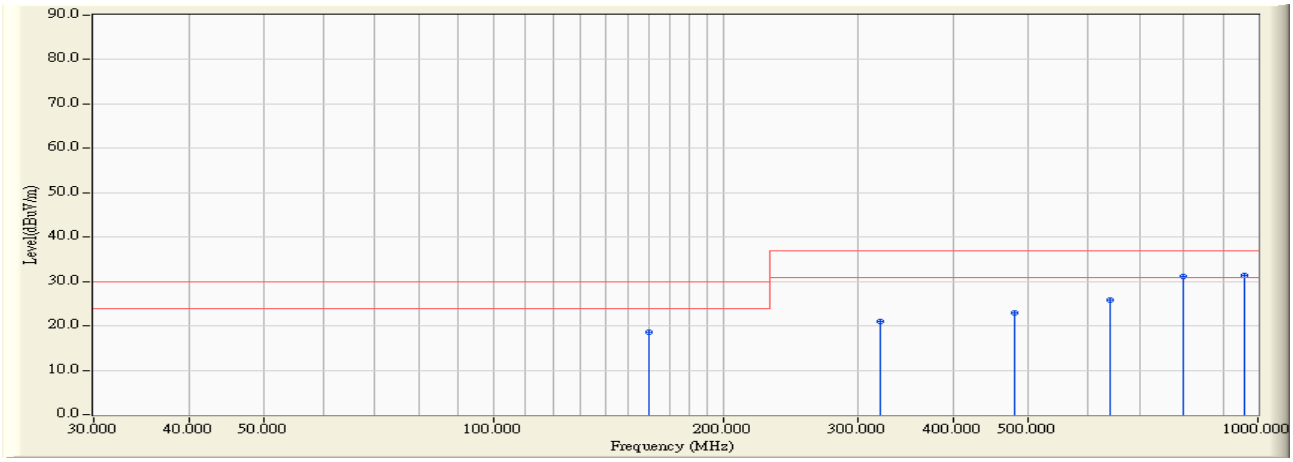


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1045.000	-9.043	52.348	43.305	-26.695	70.000	PEAK
2	*	1400.000	-7.531	52.581	45.050	-24.950	70.000	PEAK
3		1440.000	-7.361	51.193	43.832	-26.168	70.000	PEAK
4		1760.000	-6.193	46.416	40.223	-29.777	70.000	PEAK
5		1995.000	-5.364	47.508	42.144	-27.856	70.000	PEAK
6		2080.000	-5.133	48.282	43.149	-26.851	70.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site2	**Time : 2013/08/23 - 15:22**
Limit : CISPR_B_10M_QP	**Margin : 6**
Probe : SITE2_10M-3_0426 - VERTICAL	**Power : AC 230V/50Hz**
EUT : Scanner	**Note : Mode 4: Scan to PC**

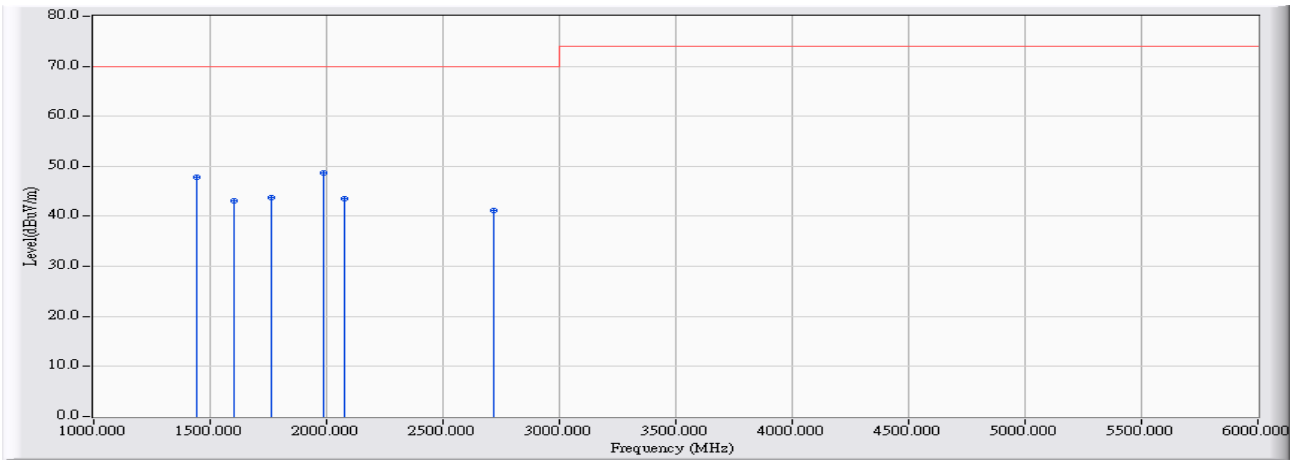


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		160.000	13.675	4.840	18.515	-11.485	30.000	QUASIPEAK
2		320.025	17.977	2.920	20.897	-16.103	37.000	QUASIPEAK
3		480.050	22.528	0.300	22.828	-14.172	37.000	QUASIPEAK
4		640.050	25.403	0.300	25.703	-11.297	37.000	QUASIPEAK
5		800.075	27.880	3.180	31.060	-5.940	37.000	QUASIPEAK
6	*	960.000	31.195	0.200	31.395	-5.605	37.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB1	**Time : 2013/08/27 - 14:35**
Limit : CISPR_22_B_(Above_1G)_3M_PK	**Margin : 0**
Probe : CB1_CISPR_22_B(above1G)-1_0901 - VERTICAL	**Power : AC 230V/50Hz**
EUT : Scanner	**Note : Mode 4: Scan to PC**

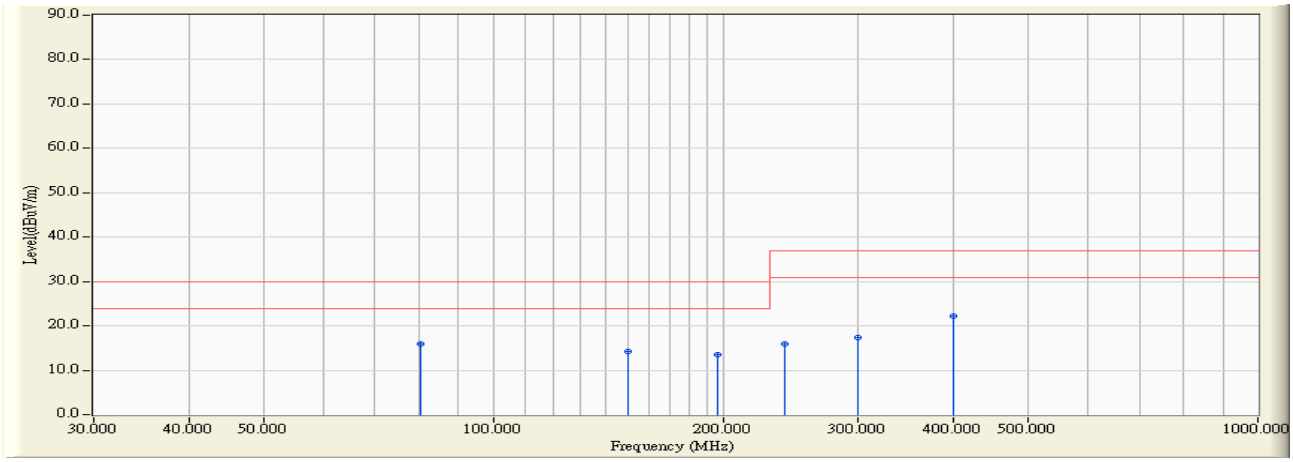


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1440.000	-7.361	55.236	47.875	-22.125	70.000	PEAK
2		1600.000	-6.756	49.773	43.017	-26.983	70.000	PEAK
3		1760.000	-6.193	49.913	43.720	-26.280	70.000	PEAK
4	*	1990.000	-5.383	53.991	48.608	-21.392	70.000	PEAK
5		2080.000	-5.133	48.692	43.559	-26.441	70.000	PEAK
6		2720.000	-3.155	44.376	41.221	-28.779	70.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site2	**Time : 2013/08/23 - 14:46**
Limit : CISPR_B_10M_QP	**Margin : 6**
Probe : SITE2_10M-3_0426 - HORIZONTAL	**Power : AC 230V/50Hz**
EUT : Scanner	**Note : Mode 5: Charge**

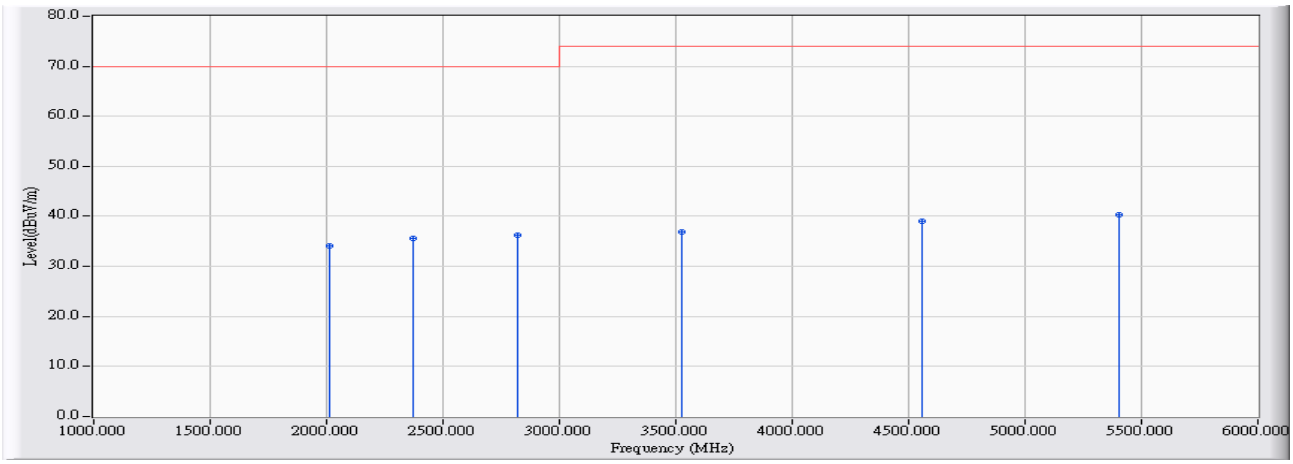


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	80.375	11.159	4.650	15.809	-14.191	30.000	QUASIPEAK
2		150.000	14.033	0.300	14.333	-15.667	30.000	QUASIPEAK
3		196.600	13.012	0.390	13.402	-16.598	30.000	QUASIPEAK
4		240.000	15.670	0.200	15.870	-21.130	37.000	QUASIPEAK
5		300.000	17.082	0.300	17.382	-19.618	37.000	QUASIPEAK
6		400.000	21.572	0.600	22.172	-14.828	37.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB1	**Time : 2013/08/27 - 14:51**
Limit : CISPR_22_B_(Above_1G)_3M_PK	**Margin : 0**
Probe : CB1_CISPR_22_B(above1G)-1_0901 - HORIZONTAL	**Power : AC 230V/50Hz**
EUT : Scanner	**Note : Mode 5: Charge**

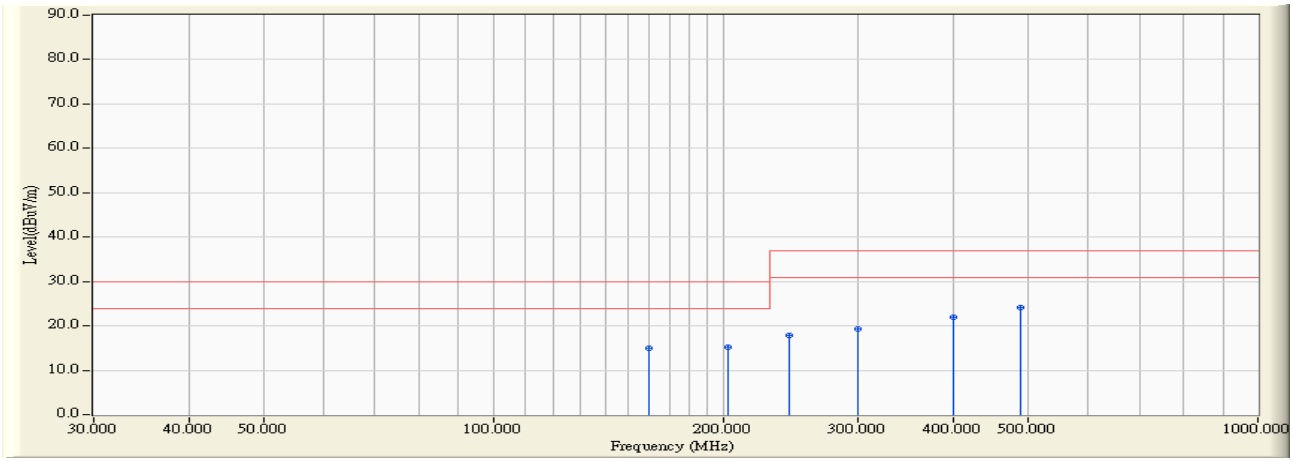


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2015.000	-5.301	39.351	34.050	-35.950	70.000	PEAK
2		2370.000	-4.383	39.929	35.546	-34.454	70.000	PEAK
3	*	2820.000	-2.752	39.089	36.337	-33.663	70.000	PEAK
4		3525.000	-1.505	38.419	36.914	-37.086	74.000	PEAK
5		4560.000	1.408	37.580	38.988	-35.012	74.000	PEAK
6		5405.000	3.525	36.698	40.223	-33.777	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site2	**Time : 2013/08/23 - 14:52**
Limit : CISPR_B_10M_QP	**Margin : 6**
Probe : SITE2_10M-3_0426 - VERTICAL	**Power : AC 230V/50Hz**
EUT : Scanner	**Note : Mode 5: Charge**

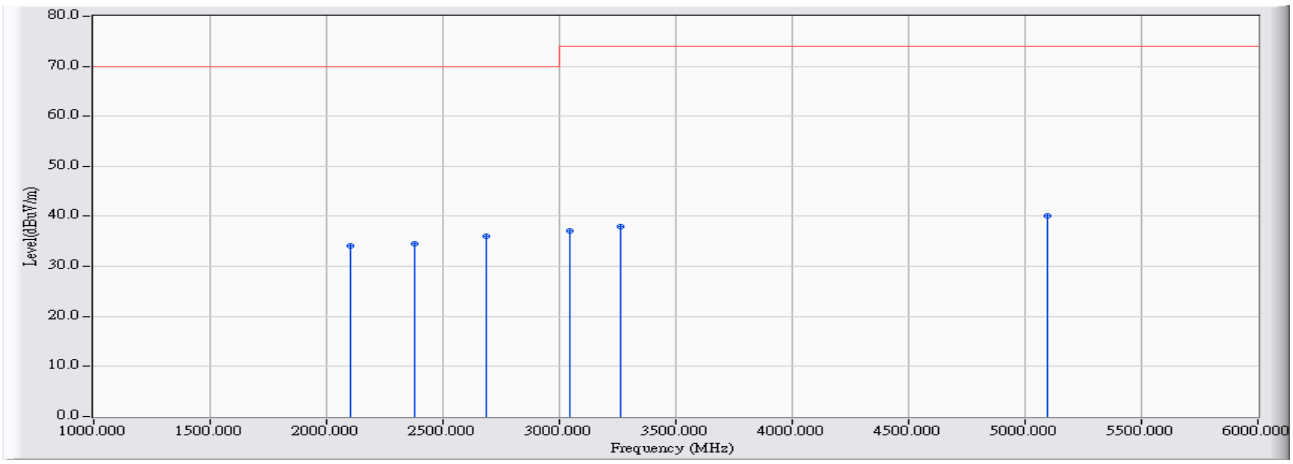


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		160.000	13.675	1.320	14.995	-15.005	30.000	QUASIPEAK
2		202.750	13.179	2.100	15.279	-14.721	30.000	QUASIPEAK
3		243.425	15.899	2.000	17.899	-19.101	37.000	QUASIPEAK
4		300.000	17.082	2.300	19.382	-17.618	37.000	QUASIPEAK
5		400.000	21.572	0.300	21.872	-15.128	37.000	QUASIPEAK
6	*	488.950	22.634	1.400	24.033	-12.967	37.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB1	**Time : 2013/08/27 - 14:49**
Limit : CISPR_22_B_(Above_1G)_3M_PK	**Margin : 0**
Probe : CB1_CISPR_22_B(above1G)-1_0901 - VERTICAL	**Power : AC 230V/50Hz**
EUT : Scanner	**Note : Mode 5: Charge**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2105.000	-5.069	39.239	34.170	-35.830	70.000	PEAK
2		2375.000	-4.370	38.992	34.622	-35.378	70.000	PEAK
3		2685.000	-3.296	39.430	36.134	-33.866	70.000	PEAK
4		3045.000	-1.987	39.163	37.176	-36.824	74.000	PEAK
5		3260.000	-1.793	39.723	37.930	-36.070	74.000	PEAK
6	*	5095.000	2.927	37.251	40.178	-33.822	74.000	PEAK

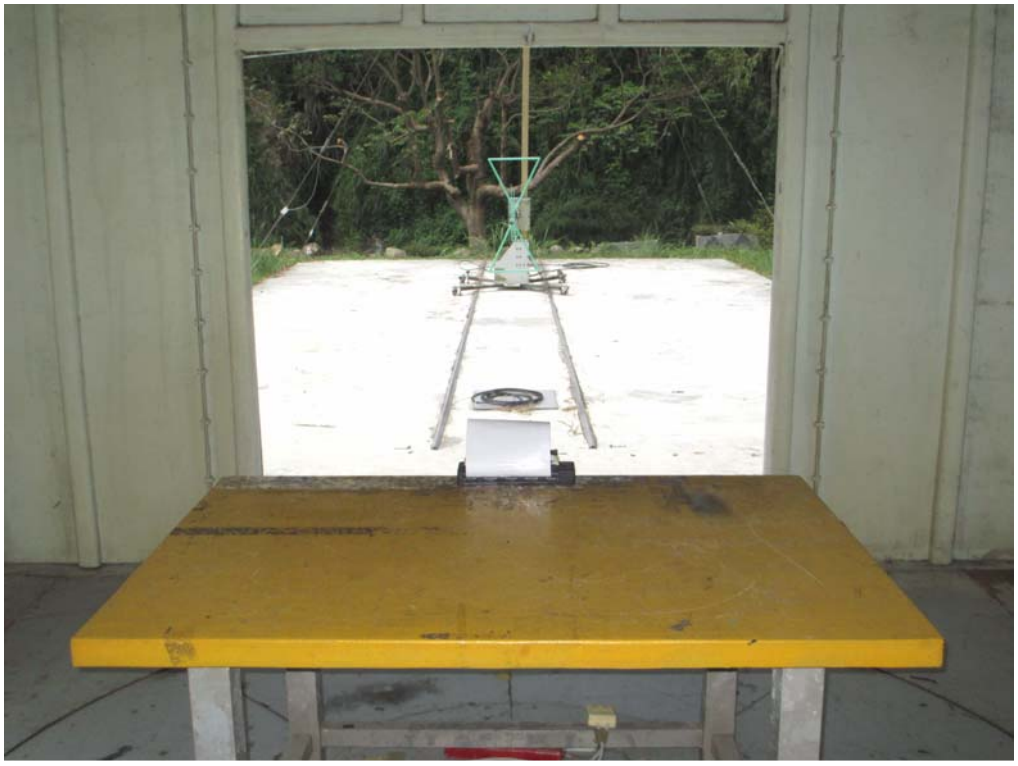
Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

4.7. Test Photograph

Test Mode : Mode 1: Scan to SD

Description : Front View of Radiated Emission Test Setup

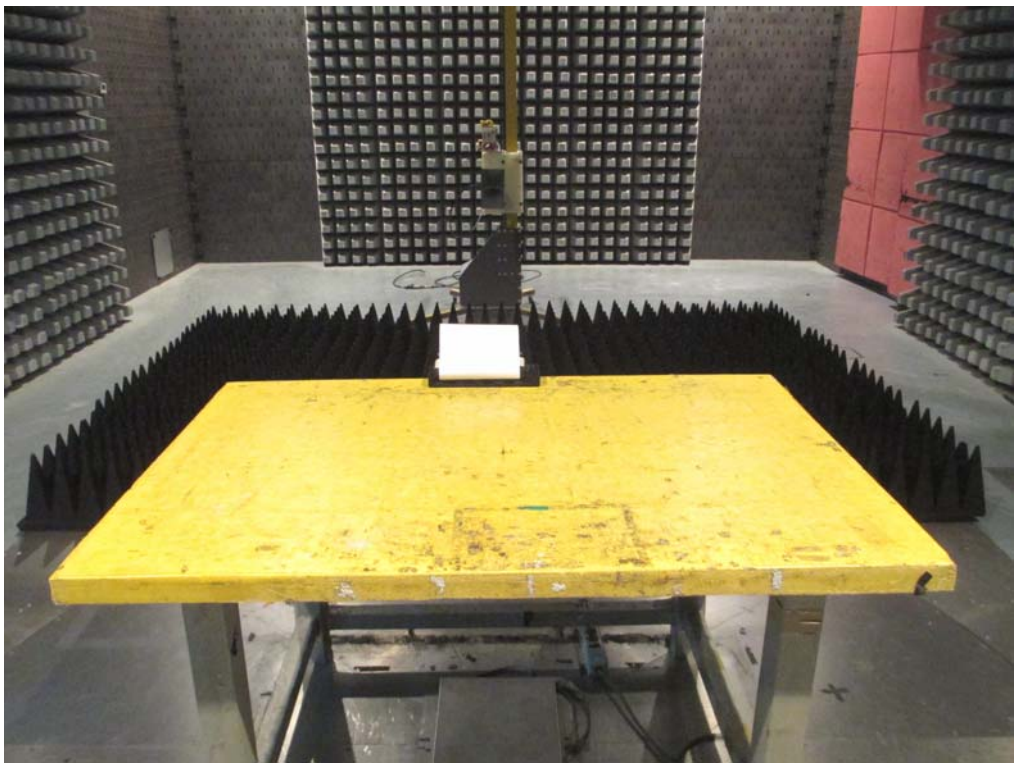


Test Mode : Mode 1: Scan to SD

Description : Back View of Radiated Emission Test Setup

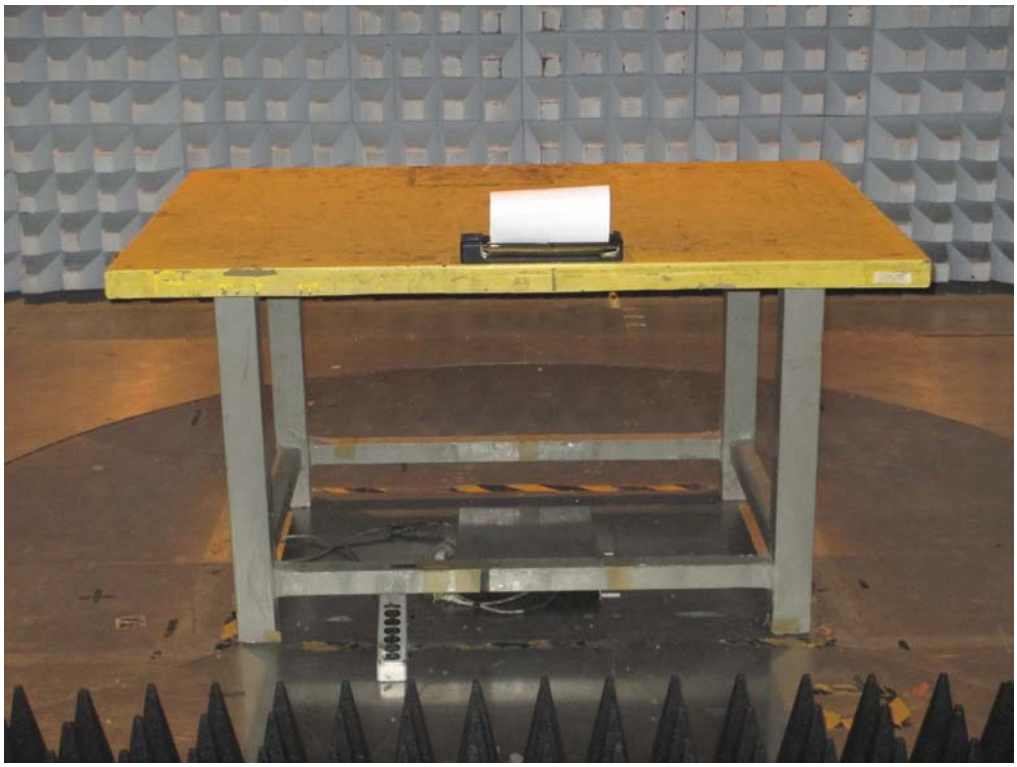
Test Mode : Mode 1: Scan to SD

Description : Front View of Radiated Emission Test Setup Horn



Test Mode : Mode 1: Scan to SD

Description : Back View of Radiated Emission Test Setup -Horn



Test Mode : Mode 2: WiFi

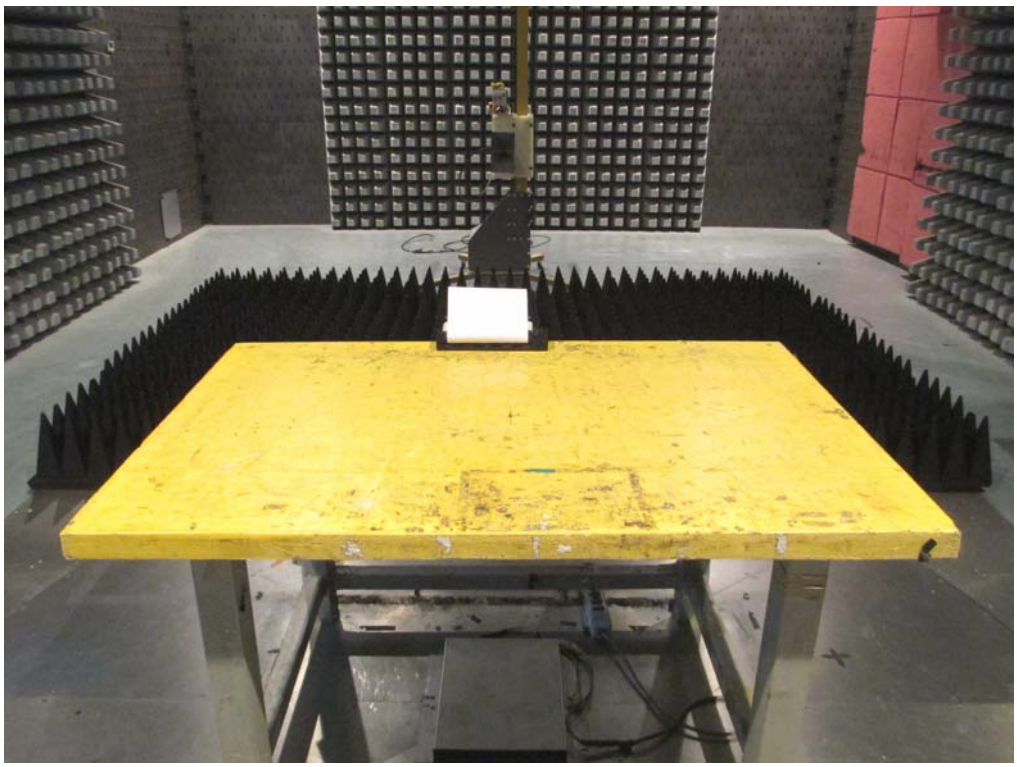
Description : Front View of Radiated Emission Test Setup

Test Mode : Mode 2: WiFi

Description : Back View of Radiated Emission Test Setup

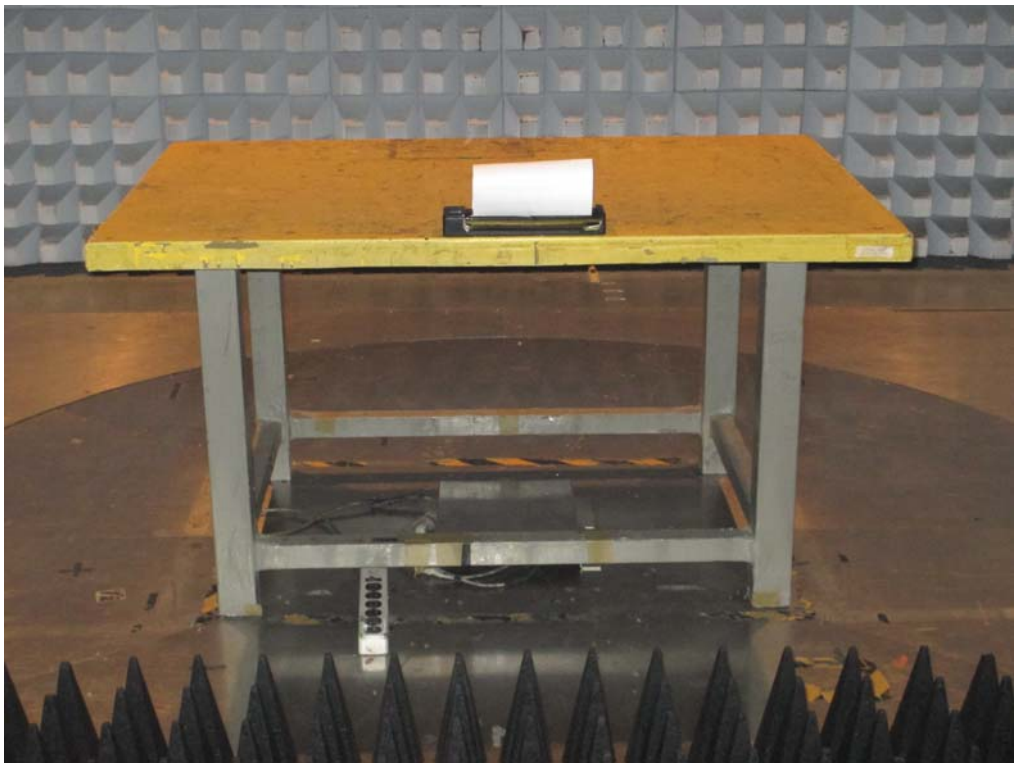
Test Mode : Mode 2: WiFi

Description : Front View of Radiated Emission Test Setup-Horn



Test Mode : Mode 2: WiFi

Description : Back View of Radiated Emission Test Setup-Horn



Test Mode : Mode 3: Read

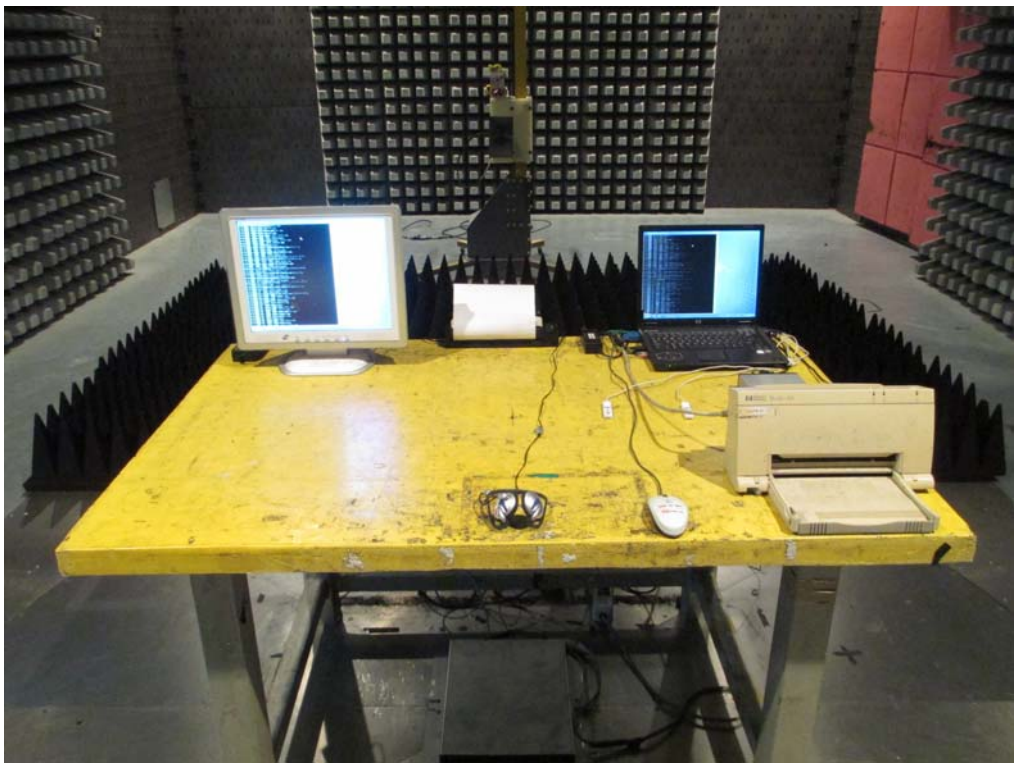
Description : Front View of Radiated Emission Test Setup

Test Mode : Mode 3: Read

Description : Back View of Radiated Emission Test Setup

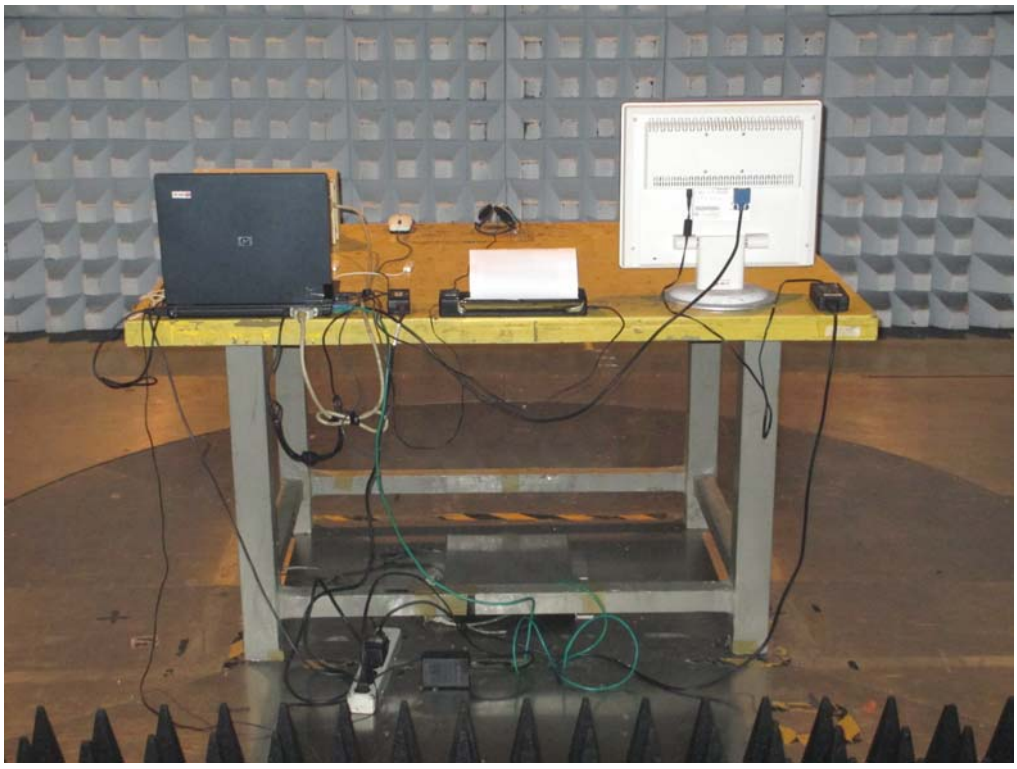
Test Mode : Mode 3: Read

Description : Front View of Radiated Emission Test Setup-Horn



Test Mode : Mode 3: Read

Description : Back View of Radiated Emission Test Setup-Horn



Test Mode : Mode 4: Scan to PC

Description : Front View of Radiated Emission Test Setup

Test Mode : Mode 4: Scan to PC

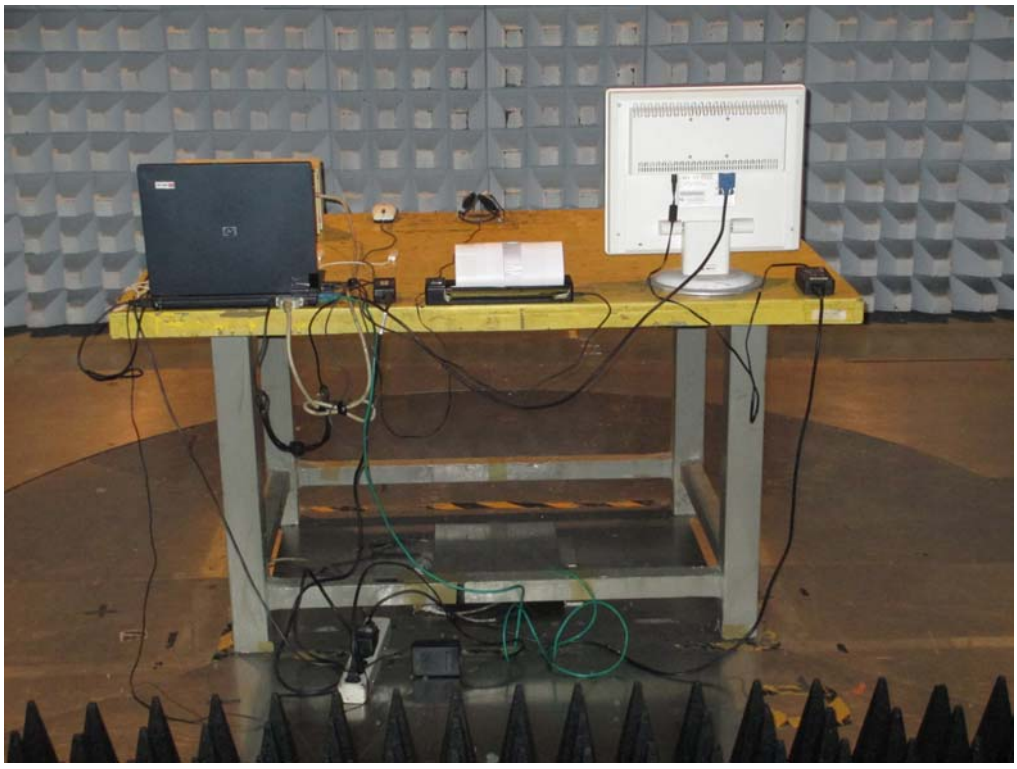
Description : Back View of Radiated Emission Test Setup

Test Mode : Mode 4: Scan to PC

Description : Front View of Radiated Emission Test Setup Horn

Test Mode : Mode 4: Scan to PC

Description : Back View of Radiated Emission Test Setup -Horn



Test Mode : Mode 5: Charge

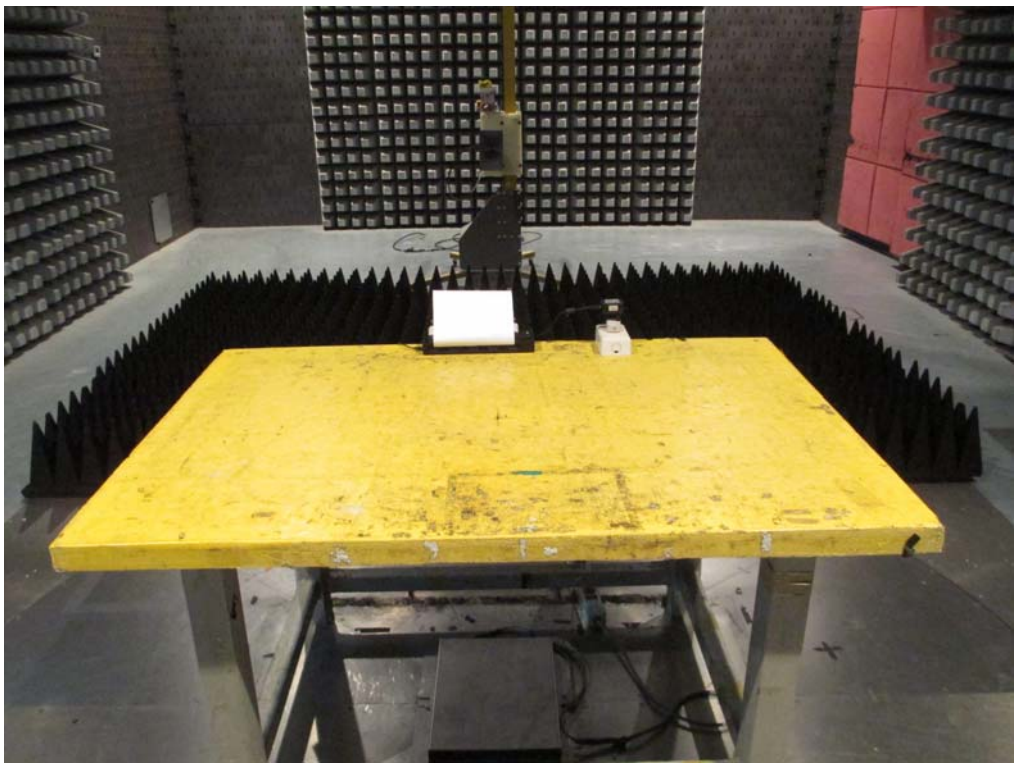
Description : Front View of Radiated Emission Test Setup

Test Mode : Mode 5: Charge

Description : Back View of Radiated Emission Test Setup

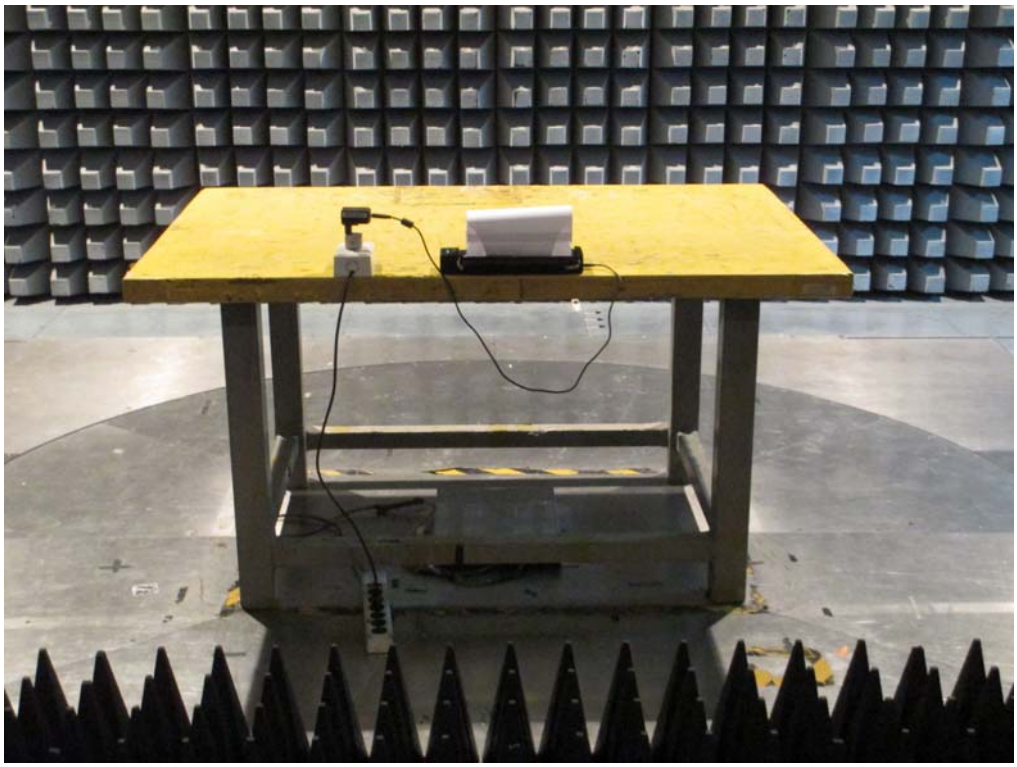
Test Mode : Mode 5: Charge

Description : Front View of Radiated Emission Test Setup-Horn



Test Mode : Mode 5: Charge

Description : Back View of Radiated Emission Test Setup-Horn

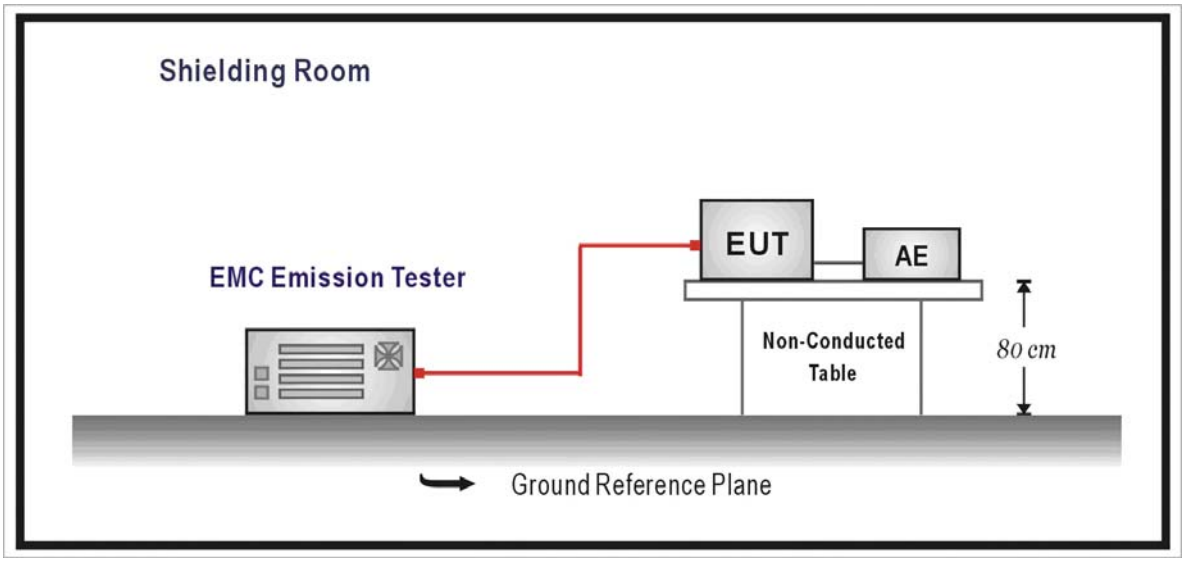


5. Harmonic Current Emission

5.1. Test Specification

According to EMC Standard : EN 61000-3-2

5.2. Test Setup



5.3. Limit

(a) Limits of Class A Harmonics Currents

Harmonics Order n	Maximum Permissible harmonic current A	Harmonics Order n	Maximum Permissible harmonic current A
Odd harmonics		Even harmonics	
3	2.30	2	1.08
5	1.14	4	0.43
7	0.77	6	0.30
9	0.40	8 ≤ n ≤ 40	0.23 * 8/n
11	0.33		
13	0.21		
15 ≤ n ≤ 39	0.15 * 15/n		

(b) Limits of Class B Harmonics Currents

For Class B equipment, the harmonic of the input current shall not exceed the maximum permissible values given in table that is the limit of Class A multiplied by a factor of 1.5.

(c) Limits of Class C Harmonics Currents

Harmonics Order n	Maximum Permissible harmonic current Expressed as a percentage of the input current at the fundamental frequency %
2	2
3	30 · λ*
5	10
7	7
9	5
11 ≤ n ≤ 39 (odd harmonics only)	3
∗λ is the circuit power factor	

(d) Limits of Class D Harmonics Currents

Harmonics Order n	Maximum Permissible harmonic current per watt mA/W	Maximum Permissible harmonic current A
3	3.4	2.30
5	1.9	1.14
7	1.0	0.77
9	0.5	0.40
11	0.35	0.33
11 ≤ n ≤ 39 (odd harmonics only)	3.85/n	See limit of Class A

5.4. Test Procedure

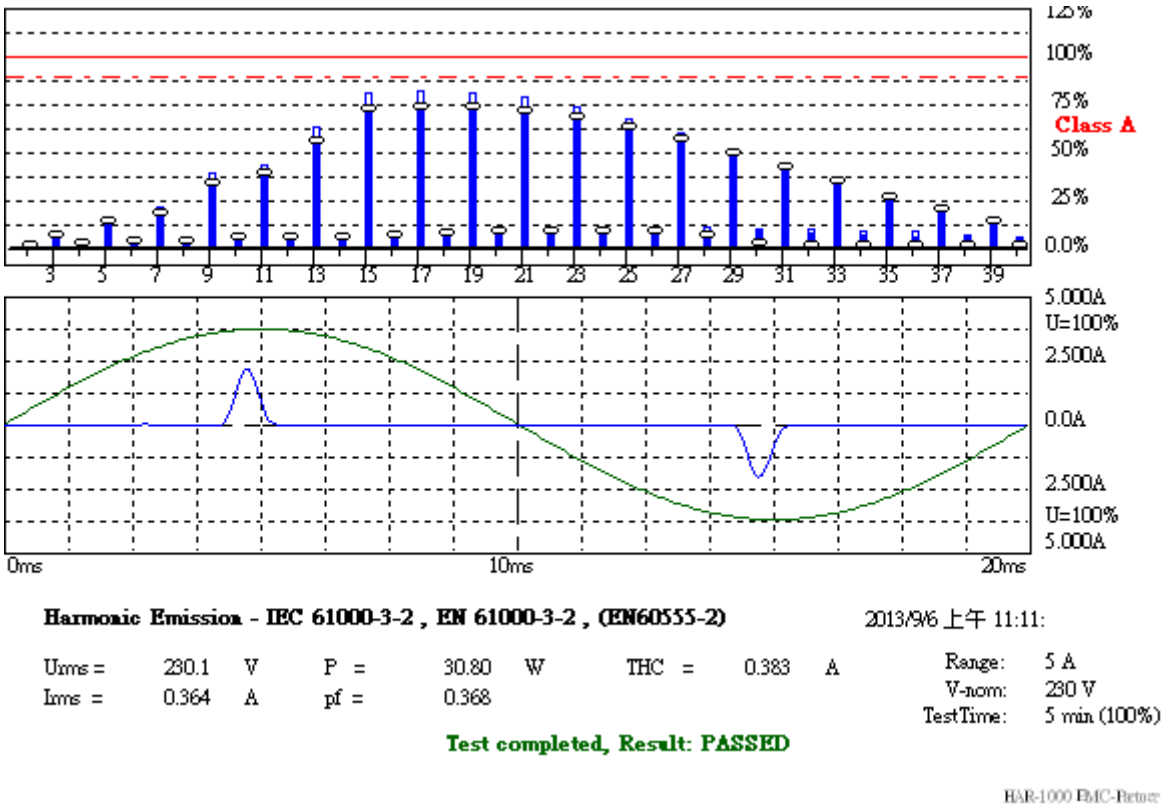
The EUT is supplied in series with power analyzer from a power source having the same normal voltage and frequency as the rated supply voltage and the equipment under test. And the rated voltage at the supply voltage of EUT of 0.94 times and 1.06 times shall be performed.

5.5. Deviation from Test Standard

No deviation.

5.6. Test Result

Product	Scanner		
Test Item	Power Harmonics		
Test Mode	Mode 3: Read		
Date of Test	2013/09/06	Test Site	SR1



Full Bar : Actual Values

Empty Bar : Maximum Values

Blue : Current , Green : Voltage , Red : Failed

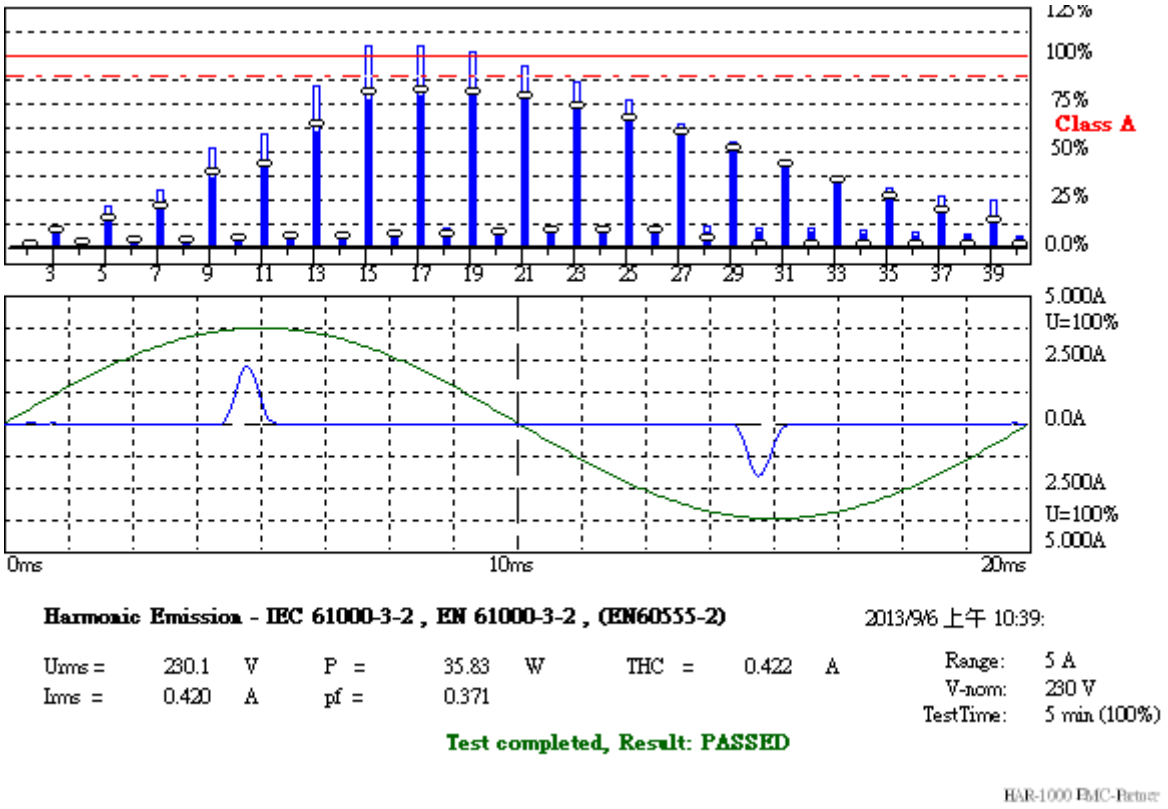
Urms =	230.1V	Freq =	50.000	Range:	5 A
Irms =	0.364A	Ipk =	2.119A	cf =	5.826
P =	30.80W	S =	83.71VA	pf =	0.368
THDi =	93.2 %	THDu =	0.20 %	Class A	

Test - Time : 5min (100 %)

Test completed, Result: PASSED

Order	Freq. [Hz]	Iavg [A]	Iavg%L [%]	Imax [A]	Imax%L [%]	Limit [A]	Status
1	50	0.1521		0.1743			
2	100	0.0066	0.6129	0.0079	0.7347	1.0800	
3	150	0.1439	6.2559	0.1660	7.2181	2.3000	
4	200	0.0066	1.5344	0.0079	1.8452	0.4300	
5	250	0.1411	12.380	0.1624	14.242	1.1400	
6	300	0.0067	2.2480	0.0082	2.7466	0.3000	
7	350	0.1367	17.749	0.1569	20.371	0.7700	
8	400	0.0069	2.9850	0.0082	3.5825	0.2300	
9	450	0.1307	32.678	0.1495	37.384	0.4000	
10	500	0.0070	3.7908	0.0085	4.6440	0.1840	
11	550	0.1236	37.447	0.1407	42.632	0.3300	
12	600	0.0071	4.6127	0.0089	5.7718	0.1533	
13	650	0.1152	54.853	0.1303	62.052	0.2100	
14	700	0.0071	5.4081	0.0089	6.7338	0.1314	
15	750	0.1061	70.704	0.1193	79.549	0.1500	
16	800	0.0070	6.1038	0.0089	7.6957	0.1150	
17	850	0.0961	72.637	0.1074	81.163	0.1324	
18	900	0.0069	6.7013	0.0085	8.3592	0.1022	
19	950	0.0860	72.648	0.0952	80.404	0.1184	
20	1000	0.0066	7.1974	0.0085	9.2880	0.0920	
21	1050	0.0757	70.696	0.0830	77.474	0.1071	
22	1100	0.0063	7.5643	0.0079	9.4870	0.0836	
23	1150	0.0656	67.054	0.0711	72.686	0.0978	
24	1200	0.0059	7.7404	0.0076	9.9514	0.0767	
25	1250	0.0557	61.891	0.0595	66.121	0.0900	
26	1300	0.0055	7.7240	0.0070	9.9182	0.0708	
27	1350	0.0464	55.633	0.0488	58.594	0.0833	
28	1400	0.0041	6.1723	0.0064	9.7524	0.0657	
29	1450	0.0376	48.497	0.0391	50.347	0.0776	
30	1500	0.0010	1.5885	0.0055	8.9562	0.0613	
31	1550	0.0297	40.912	0.0302	41.626	0.0726	
32	1600	0.0000	0.0292	0.0049	8.4918	0.0575	
33	1650	0.0226	33.206	0.0229	33.569	0.0682	
34	1700	0.0000	0.0000	0.0043	7.8948	0.0541	
35	1750	0.0166	25.788	0.0171	26.584	0.0643	
36	1800	0.0000	0.0000	0.0037	7.1650	0.0511	
37	1850	0.0116	19.009	0.0122	20.074	0.0608	
38	1900	0.0000	0.0000	0.0027	5.6723	0.0484	
39	1950	0.0077	13.295	0.0089	15.340	0.0577	
40	2000	0.0000	0.0000	0.0021	4.6440	0.0460	

Product	Scanner		
Test Item	Power Harmonics		
Test Mode	Mode 4: Scan to PC		
Date of Test	2013/09/06	Test Site	SR1



Full Bar : Actual Values

Empty Bar : Maximum Values

Blue : Current , Green : Voltage , Red : Failed

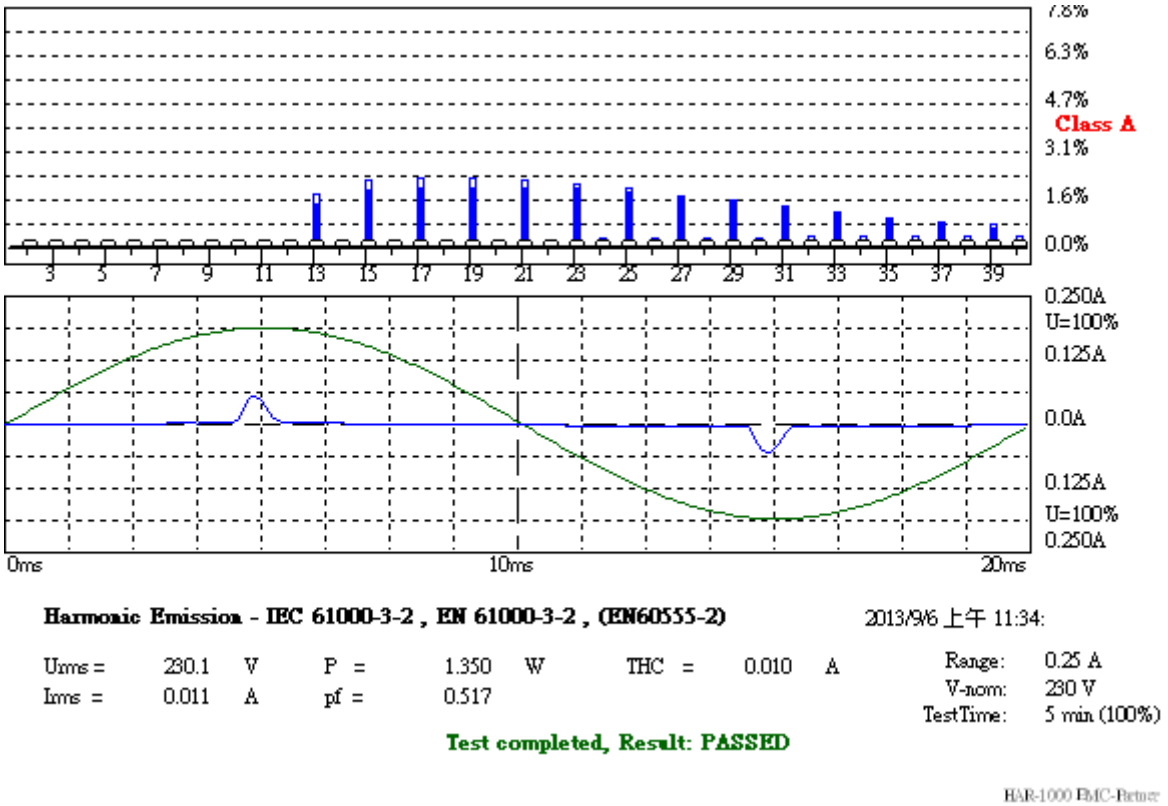
Urms =	230.1V	Freq =	50.000	Range:	5 A
Irms =	0.420A	Ipk =	2.234A	cf =	5.320
P =	35.83W	S =	96.63VA	pf =	0.371
THDi =	93.1 %	THDu =	0.20 %	Class A	

Test - Time : 5min (100 %)

Test completed, Result: PASSED

Order	Freq. [Hz]	Iavg [A]	Iavg%L [%]	Imax [A]	Imax%L [%]	Limit [A]	Status
1	50	0.1749		0.2429			
2	100	0.0062	0.5760	0.0070	0.6499	1.0800	
3	150	0.1664	7.2346	0.2332	10.137	2.3000	
4	200	0.0062	1.4372	0.0070	1.6323	0.4300	
5	250	0.1629	14.293	0.2271	19.917	1.1400	
6	300	0.0063	2.1078	0.0073	2.4414	0.3000	
7	350	0.1574	20.437	0.2176	28.258	0.7700	
8	400	0.0064	2.7913	0.0076	3.3171	0.2300	
9	450	0.1500	37.488	0.2054	51.346	0.4000	
10	500	0.0065	3.5457	0.0079	4.3123	0.1840	
11	550	0.1411	42.752	0.1904	57.706	0.3300	
12	600	0.0066	4.3160	0.0085	5.5728	0.1533	
13	650	0.1308	62.288	0.1740	82.833	0.2100	
14	700	0.0067	5.0608	0.0085	6.5016	0.1314	
15	750	0.1197	79.828	0.1563	104.17	0.1500	
16	800	0.0066	5.7590	0.0089	7.6957	0.1150	
17	850	0.1078	81.462	0.1376	103.99	0.1324	
18	900	0.0065	6.3750	0.0089	8.6577	0.1022	
19	950	0.0956	80.741	0.1187	100.25	0.1184	
20	1000	0.0063	6.8613	0.0085	9.2880	0.0920	
21	1050	0.0833	77.738	0.1004	93.709	0.1071	
22	1100	0.0061	7.2409	0.0082	9.8519	0.0836	
23	1150	0.0713	72.861	0.0833	85.164	0.0978	
24	1200	0.0057	7.4502	0.0079	10.349	0.0767	
25	1250	0.0597	66.324	0.0674	74.938	0.0900	
26	1300	0.0052	7.3706	0.0073	10.349	0.0708	
27	1350	0.0489	58.690	0.0531	63.721	0.0833	
28	1400	0.0023	3.5146	0.0067	10.217	0.0657	
29	1450	0.0390	50.272	0.0412	53.101	0.0776	
30	1500	0.0007	1.1660	0.0058	9.4538	0.0613	
31	1550	0.0302	41.638	0.0311	42.887	0.0726	
32	1600	0.0004	0.6750	0.0049	8.4918	0.0575	
33	1650	0.0226	33.173	0.0238	34.912	0.0682	
34	1700	0.0000	0.0000	0.0043	7.8948	0.0541	
35	1750	0.0163	25.430	0.0186	28.958	0.0643	
36	1800	0.0000	0.0000	0.0034	6.5679	0.0511	
37	1850	0.0114	18.771	0.0153	25.092	0.0608	
38	1900	0.0000	0.0000	0.0027	5.6723	0.0484	
39	1950	0.0080	13.793	0.0134	23.275	0.0577	
40	2000	0.0000	0.0000	0.0021	4.6440	0.0460	

Product	Scanner		
Test Item	Power Harmonics		
Test Mode	Mode 5: Charge		
Date of Test	2013/09/06	Test Site	SR1



Full Bar : Actual Values

Empty Bar : Maximum Values

Blue : Current , Green : Voltage , Red : Failed

Urms =	230.1V	Freq =	50.000	Range:	0.25 A
Irms =	0.011A	Ipk =	0.058A	cf =	5.108
P =	1.350W	S =	2.612VA	pf =	0.517
THDi =	85.8 %	THDu =	0.10 %	Class A	

Test - Time : 5min (100 %)

Test completed, Result: PASSED

Order	Freq. [Hz]	Iavg [A]	Iavg%L [%]	Imax [A]	Imax%L [%]	Limit [A]	Status
1	50	0.0062		0.0067			
2	100	0.0000	0.0000	0.0001	0.0113	1.0800	
3	150	0.0000	0.0000	0.0043	0.1884	2.3000	
4	200	0.0000	0.0000	0.0001	0.0284	0.4300	
5	250	0.0000	0.0000	0.0043	0.3734	1.1400	
6	300	0.0000	0.0000	0.0001	0.0407	0.3000	
7	350	0.0000	0.0000	0.0041	0.5350	0.7700	
8	400	0.0000	0.0000	0.0001	0.0531	0.2300	
9	450	0.0000	0.0000	0.0039	0.9842	0.4000	
10	500	0.0000	0.0000	0.0001	0.0663	0.1840	
11	550	0.0000	0.0000	0.0037	1.1328	0.3300	
12	600	0.0000	0.0000	0.0001	0.0796	0.1533	
13	650	0.0000	0.0000	0.0035	1.6567	0.2100	
14	700	0.0000	0.0000	0.0001	0.0929	0.1314	
15	750	0.0000	0.0000	0.0032	2.1362	0.1500	
16	800	0.0000	0.0000	0.0001	0.1061	0.1150	
17	850	0.0000	0.0000	0.0029	2.1905	0.1324	
18	900	0.0000	0.0000	0.0001	0.1194	0.1022	
19	950	0.0000	0.0000	0.0026	2.1905	0.1184	
20	1000	0.0000	0.0000	0.0001	0.1327	0.0920	
21	1050	0.0000	0.0000	0.0023	2.1220	0.1071	
22	1100	0.0000	0.0000	0.0001	0.1642	0.0836	
23	1150	0.0000	0.0000	0.0020	1.9965	0.0978	
24	1200	0.0000	0.0000	0.0001	0.1791	0.0767	
25	1250	0.0000	0.0000	0.0016	1.8311	0.0900	
26	1300	0.0000	0.0000	0.0001	0.1941	0.0708	
27	1350	0.0000	0.0000	0.0014	1.6296	0.0833	
28	1400	0.0000	0.0000	0.0001	0.2090	0.0657	
29	1450	0.0000	0.0000	0.0011	1.4357	0.0776	
30	1500	0.0000	0.0000	0.0001	0.2239	0.0613	
31	1550	0.0000	0.0000	0.0009	1.2614	0.0726	
32	1600	0.0000	0.0000	0.0001	0.2388	0.0575	
33	1650	0.0000	0.0000	0.0007	1.0742	0.0682	
34	1700	0.0000	0.0000	0.0001	0.2538	0.0541	
35	1750	0.0000	0.0000	0.0006	0.9020	0.0643	
36	1800	0.0000	0.0000	0.0001	0.2687	0.0511	
37	1850	0.0000	0.0000	0.0005	0.7528	0.0608	
38	1900	0.0000	0.0000	0.0001	0.2836	0.0484	
39	1950	0.0000	0.0000	0.0004	0.6612	0.0577	
40	2000	0.0000	0.0000	0.0001	0.2985	0.0460	

5.7. Test Photograph

Test Mode : Mode 3: Read

Description : Power Harmonics Test Setup

Test Mode : Mode 4: Scan to PC

Description : Power Harmonics Test Setup

Test Mode : Mode 5: Charge

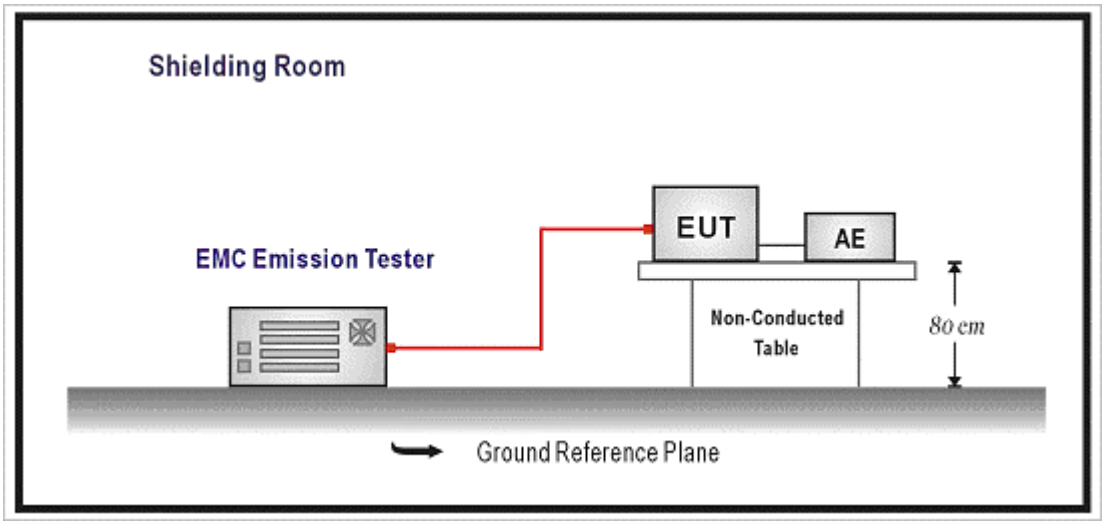
Description : Power Harmonics Test Setup

6. Voltage Fluctuation and Flicker

6.1. Test Specification

According to EMC Standard : EN 61000-3-3

6.2. Test Setup



6.3. Limit

The following limits apply:

- the value of P_{st} shall not be greater than 1.0;
- the value of P_{lt} shall not be greater than 0.65;
- the value of d(t) during a voltage change shall not exceed 3.3 % for more than 500 ms;
- the relative steady-state voltage change, d_c, shall not exceed 3.3 %;
- the maximum relative voltage change, d_{max}, shall not exceed;

a) 4 % without additional conditions;

b) 6 % for equipment which is:

- switched manually, or
- switched automatically more frequently than twice per day, and also has either a delayed restart (the delay being not less than a few tens of seconds), or manual restart, after a power supply interruption.

NOTE The cycling frequency will be further limited by the P_{st} and P_{1t} limit.

For example: a d_{max} of 6%producing a rectangular voltage change characteristic twice per hour will give a P_{1t} of about 0.65.

c) 7 % for equipment which is:

- attended whilst in use (for example: hair dryers, vacuum cleaners, kitchen equipment such as mixers, garden equipment such as lawn mowers, portable tools such as electric drills), or
- switched on automatically, or is intended to be switched on manually, no more than twice per day, and also has either a delayed restart (the delay being not less than a few tens of seconds) or manual restart, after a power supply interruption.

P_{st} and P_{1t} requirements shall not be applied to voltage changes caused by manual switching.

6.4. Test Procedure

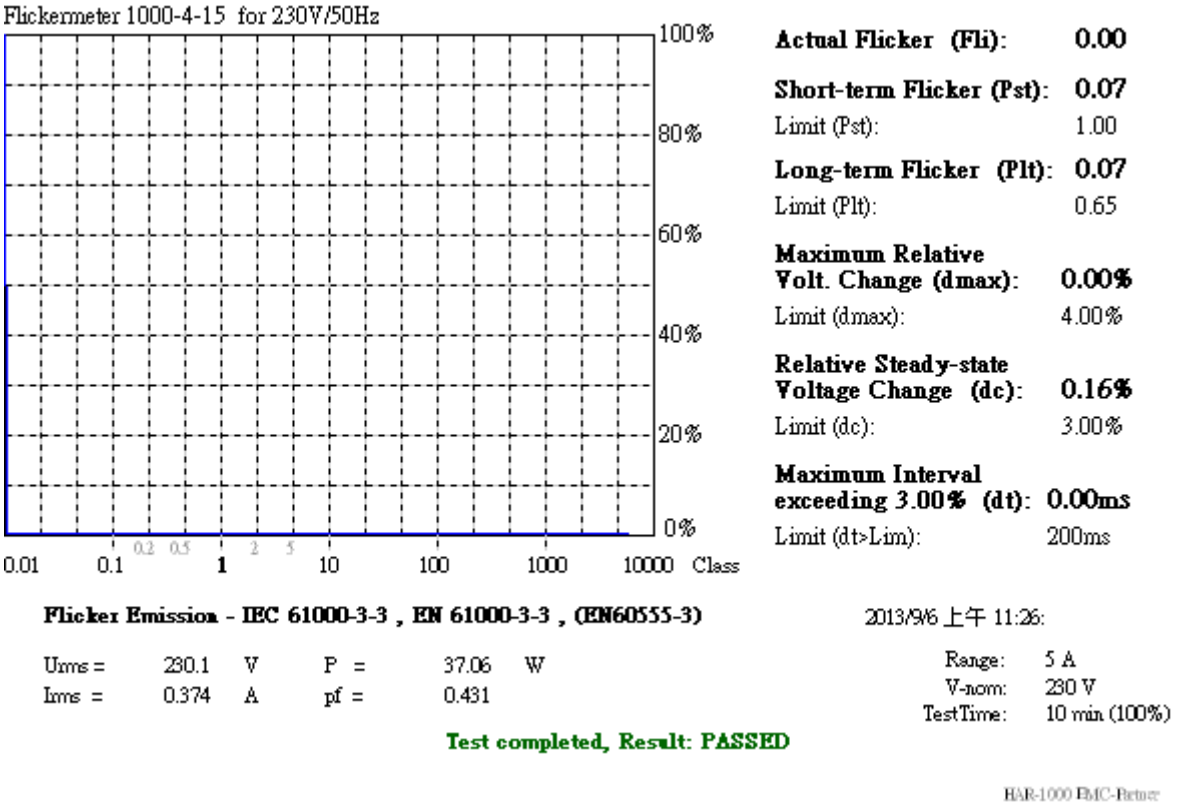
The EUT is supplied in series with power analyzer from a power source having the same normal voltage and frequency as the rated supply voltage and the equipment under test. And the rated voltage at the supply voltage of EUT of 0.94 times and 1.06 times shall be performed.

6.5. Deviation from Test Standard

No deviation.

6.6. Test Result

Product	Scanner		
Test Item	Voltage Fluctuation and Flicker		
Test Mode	Mode 3: Read		
Date of Test	2013/09/06	Test Site	SR1



Full Bar : Actual Values

Empty Bar : Maximum Values

Circles : Average Values

Blue : Current , Green : Voltage , Red : Failed

Urms = 230.1V Freq = 50.000 Range: 5 A
Irms = 0.374A Ipk = 2.114A cf = 5.660
P = 37.06W S = 85.95VA pf = 0.431

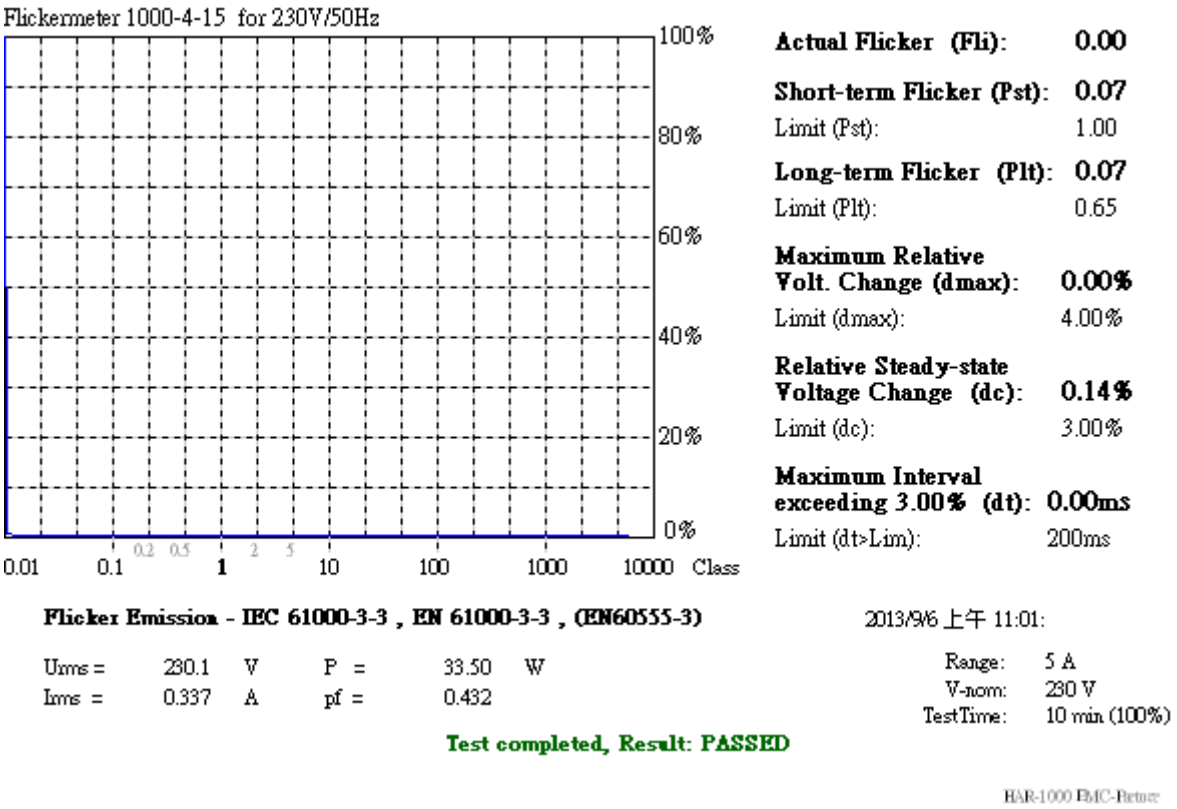
Test - Time : 1 x 10min = 10min (100 %)

LIN (Line Impedance Network) : L: 0.24ohm +j0.15ohm N: 0.16ohm +j0.10ohm

Limits : Plt : 0.65 Pst : 1.00
dmax : 4.00 % dc : 3.00 %
dtLim: 3.00 % dt>Lim: 200ms

Test completed, Result: PASSED

Product	Scanner		
Test Item	Voltage Fluctuation and Flicker		
Test Mode	Mode 4: Scan to PC		
Date of Test	2013/09/06	Test Site	SR1



Full Bar : Actual Values
Empty Bar : Maximum Values
Circles : Average Values
Blue : Current , Green : Voltage , Red : Failed

Urms = 230.1V Freq = 50.000 Range: 5 A
Irms = 0.337A Ipk = 1.707A cf = 5.065
P = 33.50W S = 77.53VA pf = 0.432

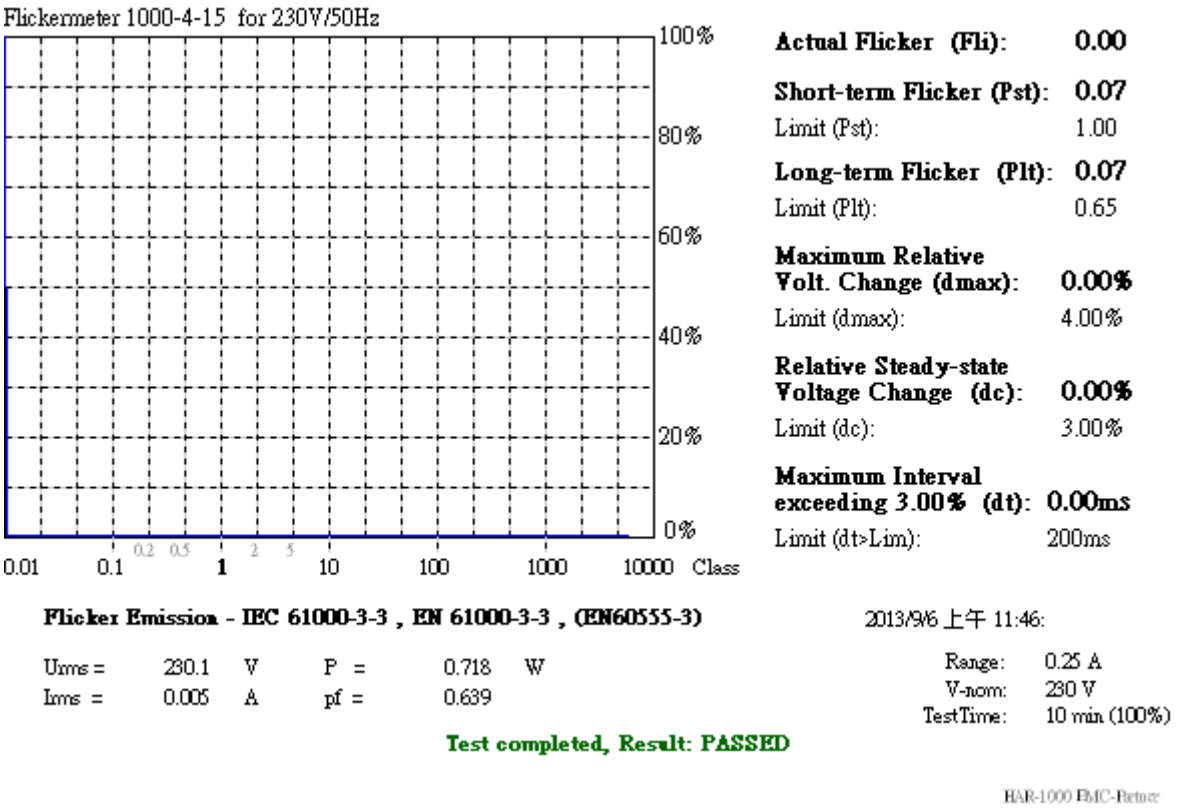
Test - Time : 1 x 10min = 10min (100 %)

LIN (Line Impedance Network) : L: 0.24ohm +j0.15ohm N: 0.16ohm +j0.10ohm

Limits : Plt : 0.65 Pst : 1.00
dmax : 4.00 % dc : 3.00 %
dtLim: 3.00 % dt>Lim: 200ms

Test completed, Result: PASSED

Product	Scanner		
Test Item	Voltage Fluctuation and Flicker		
Test Mode	Mode 5: Charge		
Date of Test	2013/09/06	Test Site	SR1



Full Bar : Actual Values
Empty Bar : Maximum Values
Circles : Average Values
Blue : Current , Green : Voltage , Red : Failed

Urms = 230.1V Freq = 50.000 Range: 0.25 A
Irms = 0.005A Ipk = 0.024A cf = 4.900
P = 0.718W S = 1.124VA pf = 0.639

Test - Time : 1 x 10min = 10min (100 %)

LIN (Line Impedance Network) : L: 0.24ohm +j0.15ohm N: 0.16ohm +j0.10ohm

Limits : Plt : 0.65 Pst : 1.00
dmax : 4.00 % dc : 3.00 %
dtLim: 3.00 % dt>Lim: 200ms

Test completed, Result: PASSED

6.7. Test Photograph

Test Mode : Mode 3: Read

Description : Voltage Fluctuation and Flicker Test Setup

Test Mode : Mode 4: Scan to PC

Description : Voltage Fluctuation and Flicker Test Setup

Test Mode : Mode 5: Charge

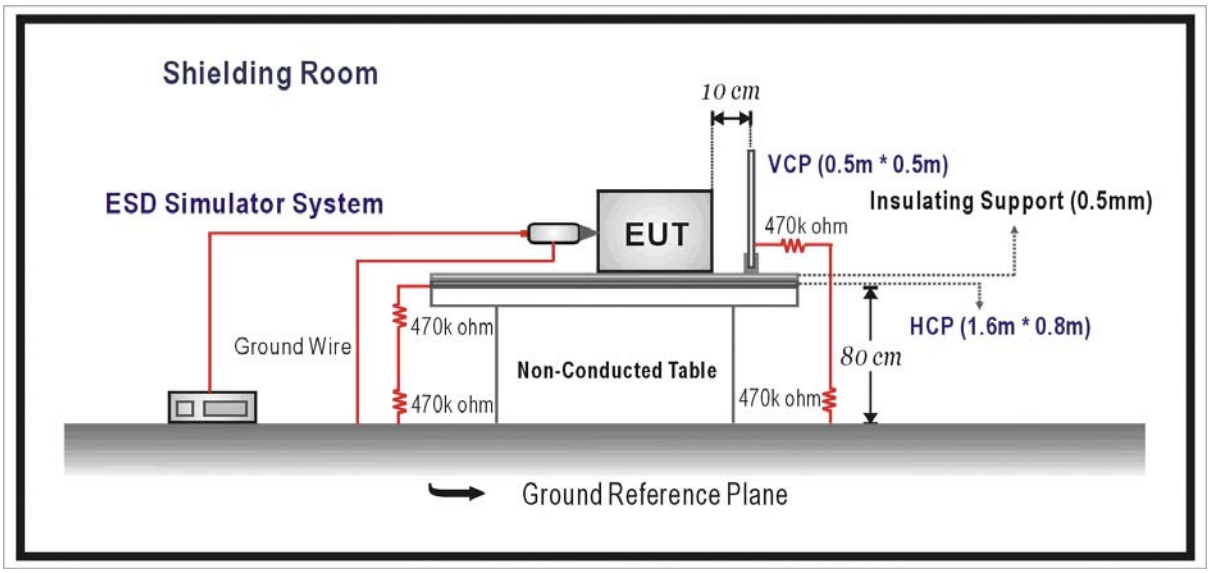
Description : Voltage Fluctuation and Flicker Test Setup

7. Electrostatic Discharge

7.1. Test Specification

According to Standard : IEC 61000-4-2 and EN 61000-4-2

7.2. Test Setup



7.3. Limit

Item	Environmental Phenomena	Units	Test Specification	Performance Criteria
EN 55024 & ETSI EN 301 489-1 Test Level				
Enclosure Port				
	Electrostatic Discharge	kV(Charge Voltage)	±8 Air Discharge ±4 Contact Discharge	B

7.4. Test Procedure

Direct application of discharges to the EUT:

Contact discharge was applied only to conductive surfaces of the EUT.

Air discharges were applied only to non-conductive surfaces of the EUT.

During the test, it was performed with single discharges. For the single discharge time between successive single discharges will be keep longer 1 second. It was at least ten single discharges with positive and negative at the same selected point.

The selected point, which was performed with electrostatic discharge, was marked on the red label of the EUT.

Indirect application of discharges to the EUT:

Vertical Coupling Plane (VCP):

The coupling plane, of dimensions 0.5m x 0.5m, is placed parallel to, and positioned at a distance 0.1m from, the EUT, with the Discharge Electrode touching the coupling plane.

The four faces of the EUT will be performed with electrostatic discharge. It was at least ten single discharges with positive and negative at the same selected point.

Horizontal Coupling Plane (HCP):

The coupling plane is placed under to the EUT. The generator shall be positioned vertically at a distance of 0.1m from the EUT, with the Discharge Electrode touching the coupling plane.

The four faces of the EUT will be performed with electrostatic discharge. It was at least ten single discharges with positive and negative at the same selected point.

7.5. Deviation from Test Standard

No deviation.

7.6. Test Result

Product	Scanner		
Test Item	Electrostatic Discharge		
Test Mode	Mode 1: Scan to SD		
Date of Test	2013/09/13	Test Site	SR1

EN 55024

Item	Amount of Discharge	Voltage kV	Required Criteria	Complied To Criteria (A,B,C)	Results
Air Discharge	10	+2	B	A	Pass
	10	-2	B	A	Pass
Air Discharge	10	+4	B	A	Pass
	10	-4	B	A	Pass
Air Discharge	10	+8	B	A	Pass
	10	-8	B	A	Pass
Indirect Discharge	25	+2	B	A	Pass
(HCP)	25	-2	B	A	Pass
Indirect Discharge	25	+4	B	A	Pass
(HCP)	25	-4	B	A	Pass
Indirect Discharge	25	+2	B	A	Pass
(VCP Front)	25	-2	B	A	Pass
Indirect Discharge	25	+4	B	A	Pass
(VCP Front)	25	-4	B	A	Pass
Indirect Discharge	25	+2	B	A	Pass
(VCP Left)	25	-2	B	A	Pass
Indirect Discharge	25	+4	B	A	Pass
(VCP Left)	25	-4	B	A	Pass
Indirect Discharge	25	+2	B	A	Pass
(VCP Back)	25	-2	B	A	Pass
Indirect Discharge	25	+4	B	A	Pass
(VCP Back)	25	-4	B	A	Pass
Indirect Discharge	25	+2	B	A	Pass
(VCP Right)	25	-2	B	A	Pass
Indirect Discharge	25	+4	B	A	Pass
(VCP Right)	25	-4	B	A	Pass

NR: No Requirement

☒ Meet criteria A: Operate as intended during and after the test

☐ Meet criteria B: Operate as intended after the test

☐ Meet criteria C: Loss/Error of function

☐ Additional Information

☐ EUT stopped operation and could / could not be reset by operator at ____ kV.

☒ No false alarms or other malfunctions were observed during or after the test.

Remark:

The Contact discharges were applied-at least total 200 discharges at a minimum of four test points.

Product	Scanner		
Test Item	Electrostatic Discharge		
Test Mode	Mode 1: Scan to SD		
Date of Test	2013/09/13	Test Site	SR1

ETSI EN 301 489-1

Item	Amount of Discharge	Voltage kV	Required Criteria	Complied To Criteria (A,B,C)	Results
Air Discharge	10	+2	B	A	Pass
	10	-2	B	A	Pass
Air Discharge	10	+4	B	A	Pass
	10	-4	B	A	Pass
Air Discharge	10	+8	B	A	Pass
	10	-8	B	A	Pass
Indirect Discharge	10	+2	B	A	Pass
(HCP)	10	-2	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(HCP)	10	-4	B	A	Pass
Indirect Discharge	10	+2	B	A	Pass
(VCP Front)	10	-2	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(VCP Front)	10	-4	B	A	Pass
Indirect Discharge	10	+2	B	A	Pass
(VCP Left)	10	-2	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(VCP Left)	10	-4	B	A	Pass
Indirect Discharge	10	+2	B	A	Pass
(VCP Back)	10	-2	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(VCP Back)	10	-4	B	A	Pass
Indirect Discharge	10	+2	B	A	Pass
(VCP Right)	10	-2	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(VCP Right)	10	-4	B	A	Pass

NR: No Requirement

☒ Meet criteria A: Operate as intended during and after the test

☐ Meet criteria B: Operate as intended after the test

☐ Meet criteria C: Loss/Error of function

☐ Additional Information

☐ EUT stopped operation and could / could not be reset by operator at kV.

☒ No false alarms or other malfunctions were observed during or after the test.

Product	Scanner		
Test Item	Electrostatic Discharge		
Test Mode	Mode 2: WiFi		
Date of Test	2013/09/13	Test Site	SR1

EN 55024

Item	Amount of Discharge	Voltage kV	Required Criteria	Complied To Criteria (A,B,C)	Results
Air Discharge	10	+2	B	A	Pass
	10	-2	B	A	Pass
Air Discharge	10	+4	B	A	Pass
	10	-4	B	A	Pass
Air Discharge	10	+8	B	A	Pass
	10	-8	B	A	Pass
Indirect Discharge	25	+2	B	A	Pass
(HCP)	25	-2	B	A	Pass
Indirect Discharge	25	+4	B	A	Pass
(HCP)	25	-4	B	A	Pass
Indirect Discharge	25	+2	B	A	Pass
(VCP Front)	25	-2	B	A	Pass
Indirect Discharge	25	+4	B	A	Pass
(VCP Front)	25	-4	B	A	Pass
Indirect Discharge	25	+2	B	A	Pass
(VCP Left)	25	-2	B	A	Pass
Indirect Discharge	25	+4	B	A	Pass
(VCP Left)	25	-4	B	A	Pass
Indirect Discharge	25	+2	B	A	Pass
(VCP Back)	25	-2	B	A	Pass
Indirect Discharge	25	+4	B	A	Pass
(VCP Back)	25	-4	B	A	Pass
Indirect Discharge	25	+2	B	A	Pass
(VCP Right)	25	-2	B	A	Pass
Indirect Discharge	25	+4	B	A	Pass
(VCP Right)	25	-4	B	A	Pass

NR: No Requirement

☒ Meet criteria A: Operate as intended during and after the test

☐ Meet criteria B: Operate as intended after the test

☐ Meet criteria C: Loss/Error of function

☐ Additional Information

☐ EUT stopped operation and could / could not be reset by operator at ____ kV.

☒ No false alarms or other malfunctions were observed during or after the test.

Remark:

The Contact discharges were applied-at least total 200 discharges at a minimum of four test points.

Product	Scanner		
Test Item	Electrostatic Discharge		
Test Mode	Mode 2: WiFi		
Date of Test	2013/09/13	Test Site	SR1

ETSI EN 301 489-1

Item	Amount of Discharge	Voltage kV	Required Criteria	Complied To Criteria (A,B,C)	Results
Air Discharge	10	+2	B	A	Pass
	10	-2	B	A	Pass
Air Discharge	10	+4	B	A	Pass
	10	-4	B	A	Pass
Air Discharge	10	+8	B	A	Pass
	10	-8	B	A	Pass
Indirect Discharge	10	+2	B	A	Pass
(HCP)	10	-2	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(HCP)	10	-4	B	A	Pass
Indirect Discharge	10	+2	B	A	Pass
(VCP Front)	10	-2	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(VCP Front)	10	-4	B	A	Pass
Indirect Discharge	10	+2	B	A	Pass
(VCP Left)	10	-2	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(VCP Left)	10	-4	B	A	Pass
Indirect Discharge	10	+2	B	A	Pass
(VCP Back)	10	-2	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(VCP Back)	10	-4	B	A	Pass
Indirect Discharge	10	+2	B	A	Pass
(VCP Right)	10	-2	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(VCP Right)	10	-4	B	A	Pass

NR: No Requirement

☒ Meet criteria A: Operate as intended during and after the test

☐ Meet criteria B: Operate as intended after the test

☐ Meet criteria C: Loss/Error of function

☐ Additional Information

☐ EUT stopped operation and could / could not be reset by operator at kV.

☒ No false alarms or other malfunctions were observed during or after the test.

Product	Scanner		
Test Item	Electrostatic Discharge		
Test Mode	Mode 3: Read		
Date of Test	2013/09/13	Test Site	SR1

EN 55024

Item	Amount of Discharge	Voltage kV	Required Criteria	Complied To Criteria (A,B,C)	Results
Air Discharge	10	+2	B	A	Pass
	10	-2	B	A	Pass
Air Discharge	10	+4	B	A	Pass
	10	-4	B	A	Pass
Air Discharge	10	+8	B	A	Pass
	10	-8	B	A	Pass
Indirect Discharge	25	+2	B	A	Pass
(HCP)	25	-2	B	A	Pass
Indirect Discharge	25	+4	B	A	Pass
(HCP)	25	-4	B	A	Pass
Indirect Discharge	25	+2	B	A	Pass
(VCP Front)	25	-2	B	A	Pass
Indirect Discharge	25	+4	B	A	Pass
(VCP Front)	25	-4	B	A	Pass
Indirect Discharge	25	+2	B	A	Pass
(VCP Left)	25	-2	B	A	Pass
Indirect Discharge	25	+4	B	A	Pass
(VCP Left)	25	-4	B	A	Pass
Indirect Discharge	25	+2	B	A	Pass
(VCP Back)	25	-2	B	A	Pass
Indirect Discharge	25	+4	B	A	Pass
(VCP Back)	25	-4	B	A	Pass
Indirect Discharge	25	+2	B	A	Pass
(VCP Right)	25	-2	B	A	Pass
Indirect Discharge	25	+4	B	A	Pass
(VCP Right)	25	-4	B	A	Pass

NR: No Requirement

☒ Meet criteria A: Operate as intended during and after the test

☐ Meet criteria B: Operate as intended after the test

☐ Meet criteria C: Loss/Error of function

☐ Additional Information

☐ EUT stopped operation and could / could not be reset by operator at ____ kV.

☒ No false alarms or other malfunctions were observed during or after the test.

Remark:

The Contact discharges were applied-at least total 200 discharges at a minimum of four test points.

Product	Scanner		
Test Item	Electrostatic Discharge		
Test Mode	Mode 3: Read		
Date of Test	2013/09/13	Test Site	SR1

ETSI EN 301 489-1

Item	Amount of Discharge	Voltage kV	Required Criteria	Complied To Criteria (A,B,C)	Results
Air Discharge	10	+2	B	A	Pass
	10	-2	B	A	Pass
Air Discharge	10	+4	B	A	Pass
	10	-4	B	A	Pass
Air Discharge	10	+8	B	A	Pass
	10	-8	B	A	Pass
Indirect Discharge	10	+2	B	A	Pass
(HCP)	10	-2	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(HCP)	10	-4	B	A	Pass
Indirect Discharge	10	+2	B	A	Pass
(VCP Front)	10	-2	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(VCP Front)	10	-4	B	A	Pass
Indirect Discharge	10	+2	B	A	Pass
(VCP Left)	10	-2	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(VCP Left)	10	-4	B	A	Pass
Indirect Discharge	10	+2	B	A	Pass
(VCP Back)	10	-2	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(VCP Back)	10	-4	B	A	Pass
Indirect Discharge	10	+2	B	A	Pass
(VCP Right)	10	-2	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(VCP Right)	10	-4	B	A	Pass

NR: No Requirement

☒ Meet criteria A: Operate as intended during and after the test

☐ Meet criteria B: Operate as intended after the test

☐ Meet criteria C: Loss/Error of function

☐ Additional Information

☐ EUT stopped operation and could / could not be reset by operator at kV.

☒ No false alarms or other malfunctions were observed during or after the test.

Product	Scanner		
Test Item	Electrostatic Discharge		
Test Mode	Mode 4: Scan to PC		
Date of Test	2013/09/13	Test Site	SR1

EN 55024

Item	Amount of Discharge	Voltage kV	Required Criteria	Complied To Criteria (A,B,C)	Results
Air Discharge	10	+2	B	A	Pass
	10	-2	B	A	Pass
Air Discharge	10	+4	B	A	Pass
	10	-4	B	A	Pass
Air Discharge	10	+8	B	A	Pass
	10	-8	B	A	Pass
Indirect Discharge	25	+2	B	A	Pass
(HCP)	25	-2	B	A	Pass
Indirect Discharge	25	+4	B	A	Pass
(HCP)	25	-4	B	A	Pass
Indirect Discharge	25	+2	B	A	Pass
(VCP Front)	25	-2	B	A	Pass
Indirect Discharge	25	+4	B	A	Pass
(VCP Front)	25	-4	B	A	Pass
Indirect Discharge	25	+2	B	A	Pass
(VCP Left)	25	-2	B	A	Pass
Indirect Discharge	25	+4	B	A	Pass
(VCP Left)	25	-4	B	A	Pass
Indirect Discharge	25	+2	B	A	Pass
(VCP Back)	25	-2	B	A	Pass
Indirect Discharge	25	+4	B	A	Pass
(VCP Back)	25	-4	B	A	Pass
Indirect Discharge	25	+2	B	A	Pass
(VCP Right)	25	-2	B	A	Pass
Indirect Discharge	25	+4	B	A	Pass
(VCP Right)	25	-4	B	A	Pass

NR: No Requirement

☒ Meet criteria A: Operate as intended during and after the test

☐ Meet criteria B: Operate as intended after the test

☐ Meet criteria C: Loss/Error of function

☐ Additional Information

☐ EUT stopped operation and could / could not be reset by operator at ____ kV.

☒ No false alarms or other malfunctions were observed during or after the test.

Remark:

The Contact discharges were applied-at least total 200 discharges at a minimum of four test points.

Product	Scanner		
Test Item	Electrostatic Discharge		
Test Mode	Mode 4: Scan to PC		
Date of Test	2013/09/13	Test Site	SR1

ETSI EN 301 489-1

Item	Amount of Discharge	Voltage kV	Required Criteria	Complied To Criteria (A,B,C)	Results
Air Discharge	10	+2	B	A	Pass
	10	-2	B	A	Pass
Air Discharge	10	+4	B	A	Pass
	10	-4	B	A	Pass
Air Discharge	10	+8	B	A	Pass
	10	-8	B	A	Pass
Indirect Discharge	10	+2	B	A	Pass
(HCP)	10	-2	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(HCP)	10	-4	B	A	Pass
Indirect Discharge	10	+2	B	A	Pass
(VCP Front)	10	-2	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(VCP Front)	10	-4	B	A	Pass
Indirect Discharge	10	+2	B	A	Pass
(VCP Left)	10	-2	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(VCP Left)	10	-4	B	A	Pass
Indirect Discharge	10	+2	B	A	Pass
(VCP Back)	10	-2	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(VCP Back)	10	-4	B	A	Pass
Indirect Discharge	10	+2	B	A	Pass
(VCP Right)	10	-2	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(VCP Right)	10	-4	B	A	Pass

NR: No Requirement

☒ Meet criteria A: Operate as intended during and after the test

☐ Meet criteria B: Operate as intended after the test

☐ Meet criteria C: Loss/Error of function

☐ Additional Information

☐ EUT stopped operation and could / could not be reset by operator at kV.

☒ No false alarms or other malfunctions were observed during or after the test.

Product	Scanner		
Test Item	Electrostatic Discharge		
Test Mode	Mode 5: Charge		
Date of Test	2013/09/13	Test Site	SR1

EN 55024

Item	Amount of Discharge	Voltage kV	Required Criteria	Complied To Criteria (A,B,C)	Results
Air Discharge	10	+2	B	A	Pass
	10	-2	B	A	Pass
Air Discharge	10	+4	B	A	Pass
	10	-4	B	A	Pass
Air Discharge	10	+8	B	A	Pass
	10	-8	B	A	Pass
Indirect Discharge	25	+2	B	A	Pass
(HCP)	25	-2	B	A	Pass
Indirect Discharge	25	+4	B	A	Pass
(HCP)	25	-4	B	A	Pass
Indirect Discharge	25	+2	B	A	Pass
(VCP Front)	25	-2	B	A	Pass
Indirect Discharge	25	+4	B	A	Pass
(VCP Front)	25	-4	B	A	Pass
Indirect Discharge	25	+2	B	A	Pass
(VCP Left)	25	-2	B	A	Pass
Indirect Discharge	25	+4	B	A	Pass
(VCP Left)	25	-4	B	A	Pass
Indirect Discharge	25	+2	B	A	Pass
(VCP Back)	25	-2	B	A	Pass
Indirect Discharge	25	+4	B	A	Pass
(VCP Back)	25	-4	B	A	Pass
Indirect Discharge	25	+2	B	A	Pass
(VCP Right)	25	-2	B	A	Pass
Indirect Discharge	25	+4	B	A	Pass
(VCP Right)	25	-4	B	A	Pass

NR: No Requirement

☒ Meet criteria A: Operate as intended during and after the test

☐ Meet criteria B: Operate as intended after the test

☐ Meet criteria C: Loss/Error of function

☐ Additional Information

☐ EUT stopped operation and could / could not be reset by operator at ____ kV.

☒ No false alarms or other malfunctions were observed during or after the test.

Remark:

The Contact discharges were applied-at least total 200 discharges at a minimum of four test points.

Product	Scanner		
Test Item	Electrostatic Discharge		
Test Mode	Mode 5: Charge		
Date of Test	2013/09/13	Test Site	SR1

ETSI EN 301 489-1

Item	Amount of Discharge	Voltage kV	Required Criteria	Complied To Criteria (A,B,C)	Results
Air Discharge	10	+2	B	A	Pass
	10	-2	B	A	Pass
Air Discharge	10	+4	B	A	Pass
	10	-4	B	A	Pass
Air Discharge	10	+8	B	A	Pass
	10	-8	B	A	Pass
Indirect Discharge	10	+2	B	A	Pass
(HCP)	10	-2	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(HCP)	10	-4	B	A	Pass
Indirect Discharge	10	+2	B	A	Pass
(VCP Front)	10	-2	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(VCP Front)	10	-4	B	A	Pass
Indirect Discharge	10	+2	B	A	Pass
(VCP Left)	10	-2	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(VCP Left)	10	-4	B	A	Pass
Indirect Discharge	10	+2	B	A	Pass
(VCP Back)	10	-2	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(VCP Back)	10	-4	B	A	Pass
Indirect Discharge	10	+2	B	A	Pass
(VCP Right)	10	-2	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(VCP Right)	10	-4	B	A	Pass

NR: No Requirement

☒ Meet criteria A: Operate as intended during and after the test

☐ Meet criteria B: Operate as intended after the test

☐ Meet criteria C: Loss/Error of function

☐ Additional Information

☐ EUT stopped operation and could / could not be reset by operator at kV.

☒ No false alarms or other malfunctions were observed during or after the test.

7.7. Test Photograph

Test Mode : Mode 1: Scan to SD

Description : Electrostatic Discharge (ESD) Test Setup

Test Mode : Mode 2: WiFi

Description : Electrostatic Discharge (ESD) Test Setup

Test Mode : Mode 3: Read

Description : Electrostatic Discharge (ESD) Test Setup

Test Mode : Mode 4: Scan to PC

Description : Electrostatic Discharge (ESD) Test Setup

Test Mode : Mode 5: Charge

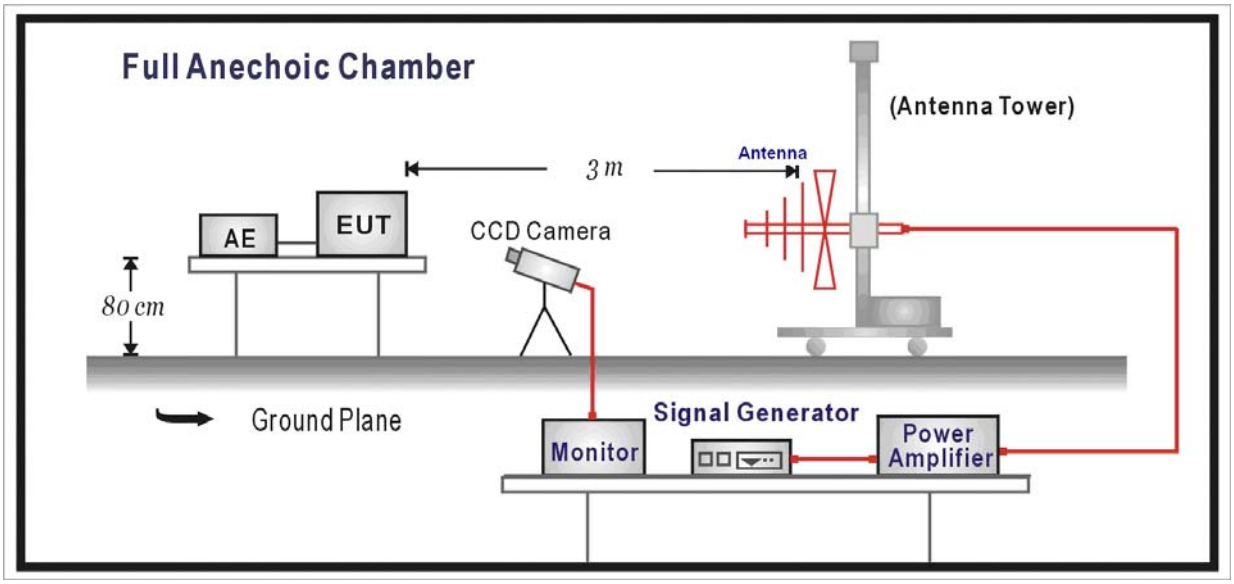
Description : Electrostatic Discharge (ESD) Test Setup

8. Radiated Susceptibility

8.1. Test Specification

According to Standard : IEC 61000-4-3 and EN 61000-4-3

8.2. Test Setup



8.3. Limit

EN 55024

Item	Environmental Phenomena	Units	Test Specification	Performance Criteria
Enclosure Port				
	Radio-Frequency	MHz	80-1000	
	Electromagnetic Field	V/m(Un-modulated, rms)	3	A
	Amplitude Modulated	% AM (1kHz)	80	

ETSI EN 301 489-1

Item	Environmental Phenomena	Units	Test Specification	Performance Criteria
Enclosure Port				
	Radio-Frequency	MHz	80-1000	
			1400-2700	
	Electromagnetic Field	V/m(Un-modulated, rms)	3	A
	Amplitude Modulated	% AM (1kHz)	80	

8.4. Test Procedure

The EUT and load, which are placed on a table that is 0.8 meter above ground, are placed with one coincident with the calibration plane such that the distance from antenna to the EUT was 3 meters.
Both horizontal and vertical polarization of the antenna and four sides of the EUT are set on measurement.
In order to judge the EUT performance, a CCD camera is used to monitor EUT screen.

All the scanning conditions are as follows:

	Condition of Test	Remarks
1.	Field Strength	3 V/m Level 2
2.	Radiated Signal	AM 80% Modulated with 1kHz
3.	Scanning Frequency	80MHz - 1000MHz
4	Dwell Time	3 Seconds
5.	Frequency step size Δf :	1%

8.5. Deviation from Test Standard

No deviation.

8.6. Test Result

Product	Scanner		
Test Item	Radiated susceptibility		
Test Mode	Mode 1: Scan to SD		
Date of Test	2013/09/05	Test Site	CB3

EN 55024

Frequency (MHz)	Position (Angle)	Polarity (H or V)	Field Strength (V/m)	Required Criteria	Complied To Criteria (A,B,C)	Results
80-1000	0	H	3	A	A	Pass
80-1000	0	V	3	A	A	Pass
80-1000	90	H	3	A	A	Pass
80-1000	90	V	3	A	A	Pass
80-1000	180	H	3	A	A	Pass
80-1000	180	V	3	A	A	Pass
80-1000	270	H	3	A	A	Pass
80-1000	270	V	3	A	A	Pass

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
  ☐ EUT stopped operation and could / could not be reset by operator at _____ V/m at frequency _____MHz.
  ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Scanner		
Test Item	Radiated susceptibility		
Test Mode	Mode 1: Scan to SD		
Date of Test	2013/09/05	Test Site	CB3

ETSI EN 301 489-1

Frequency (MHz)	Position (Angle)	Polarity (H or V)	Field Strength (V/m)	Required Criteria	Complied To Criteria (A,B,C)	Results
80-1000	0	H	3	A	A	Pass
80-1000	0	V	3	A	A	Pass
80-1000	90	H	3	A	A	Pass
80-1000	90	V	3	A	A	Pass
80-1000	180	H	3	A	A	Pass
80-1000	180	V	3	A	A	Pass
80-1000	270	H	3	A	A	Pass
80-1000	270	V	3	A	A	Pass
1400-2280	0	H	3	A	A	Pass
1400-2280	0	V	3	A	A	Pass
1400-2280	90	H	3	A	A	Pass
1400-2280	90	V	3	A	A	Pass
1400-2280	180	H	3	A	A	Pass
1400-2280	180	V	3	A	A	Pass
1400-2280	270	H	3	A	A	Pass
1400-2280	270	V	3	A	A	Pass
2607.675-2700	0	H	3	A	A	Pass
2607.675-2700	0	V	3	A	A	Pass
2607.675-2700	90	H	3	A	A	Pass
2607.675-2700	90	V	3	A	A	Pass
2607.675-2700	180	H	3	A	A	Pass
2607.675-2700	180	V	3	A	A	Pass
2607.675-2700	270	H	3	A	A	Pass
2607.675-2700	270	V	3	A	A	Pass

NR: No Requirement

☒ Meet criteria A: Operate as intended during and after the test
☐ Meet criteria B: Operate as intended after the test
☐ Meet criteria C: Loss/Error of function
☐ Additional Information
☐ EUT stopped operation and could / could not be reset by operator at ____ kV.
☒ No false alarms or other malfunctions were observed during or after the test.

Product	Scanner		
Test Item	Radiated susceptibility		
Test Mode	Mode 2: WiFi		
Date of Test	2013/09/05	Test Site	CB3

EN 55024

Frequency (MHz)	Position (Angle)	Polarity (H or V)	Field Strength (V/m)	Required Criteria	Complied To Criteria (A,B,C)	Results
80-1000	0	H	3	A	A	Pass
80-1000	0	V	3	A	A	Pass
80-1000	90	H	3	A	A	Pass
80-1000	90	V	3	A	A	Pass
80-1000	180	H	3	A	A	Pass
80-1000	180	V	3	A	A	Pass
80-1000	270	H	3	A	A	Pass
80-1000	270	V	3	A	A	Pass

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
  ☐ EUT stopped operation and could / could not be reset by operator at _____ V/m at frequency _____MHz.
  ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Scanner		
Test Item	Radiated susceptibility		
Test Mode	Mode 2: WiFi		
Date of Test	2013/09/05	Test Site	CB3

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Frequency (MHz)	Position (Angle)	Polarity (H or V)	Field Strength (V/m)	Required Criteria	Complied To Criteria (A,B,C)	Results
80-1000	0	H	3	A	A	Pass
80-1000	0	V	3	A	A	Pass
80-1000	90	H	3	A	A	Pass
80-1000	90	V	3	A	A	Pass
80-1000	180	H	3	A	A	Pass
80-1000	180	V	3	A	A	Pass
80-1000	270	H	3	A	A	Pass
80-1000	270	V	3	A	A	Pass
1400-2280	0	H	3	A	A	Pass
1400-2280	0	V	3	A	A	Pass
1400-2280	90	H	3	A	A	Pass
1400-2280	90	V	3	A	A	Pass
1400-2280	180	H	3	A	A	Pass
1400-2280	180	V	3	A	A	Pass
1400-2280	270	H	3	A	A	Pass
1400-2280	270	V	3	A	A	Pass
2607.675-2700	0	H	3	A	A	Pass
2607.675-2700	0	V	3	A	A	Pass
2607.675-2700	90	H	3	A	A	Pass
2607.675-2700	90	V	3	A	A	Pass
2607.675-2700	180	H	3	A	A	Pass
2607.675-2700	180	V	3	A	A	Pass
2607.675-2700	270	H	3	A	A	Pass
2607.675-2700	270	V	3	A	A	Pass

NR: No Requirement

☒ Meet criteria A: Operate as intended during and after the test
☐ Meet criteria B: Operate as intended after the test
☐ Meet criteria C: Loss/Error of function
☐ Additional Information
☐ EUT stopped operation and could / could not be reset by operator at ____ kV.
☒ No false alarms or other malfunctions were observed during or after the test.

Product	Scanner		
Test Item	Radiated susceptibility		
Test Mode	Mode 3: Read		
Date of Test	2013/09/05	Test Site	CB3

EN 55024

Frequency (MHz)	Position (Angle)	Polarity (H or V)	Field Strength (V/m)	Required Criteria	Complied To Criteria (A,B,C)	Results
80-1000	0	H	3	A	A	Pass
80-1000	0	V	3	A	A	Pass
80-1000	90	H	3	A	A	Pass
80-1000	90	V	3	A	A	Pass
80-1000	180	H	3	A	A	Pass
80-1000	180	V	3	A	A	Pass
80-1000	270	H	3	A	A	Pass
80-1000	270	V	3	A	A	Pass

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
  ☐ EUT stopped operation and could / could not be reset by operator at _____ V/m at frequency _____MHz.
  ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Scanner		
Test Item	Radiated susceptibility		
Test Mode	Mode 3: Read		
Date of Test	2013/09/05	Test Site	CB3

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Frequency (MHz)	Position (Angle)	Polarity (H or V)	Field Strength (V/m)	Required Criteria	Complied To Criteria (A,B,C)	Results
80-1000	0	H	3	A	A	Pass
80-1000	0	V	3	A	A	Pass
80-1000	90	H	3	A	A	Pass
80-1000	90	V	3	A	A	Pass
80-1000	180	H	3	A	A	Pass
80-1000	180	V	3	A	A	Pass
80-1000	270	H	3	A	A	Pass
80-1000	270	V	3	A	A	Pass
1400-2280	0	H	3	A	A	Pass
1400-2280	0	V	3	A	A	Pass
1400-2280	90	H	3	A	A	Pass
1400-2280	90	V	3	A	A	Pass
1400-2280	180	H	3	A	A	Pass
1400-2280	180	V	3	A	A	Pass
1400-2280	270	H	3	A	A	Pass
1400-2280	270	V	3	A	A	Pass
2607.675-2700	0	H	3	A	A	Pass
2607.675-2700	0	V	3	A	A	Pass
2607.675-2700	90	H	3	A	A	Pass
2607.675-2700	90	V	3	A	A	Pass
2607.675-2700	180	H	3	A	A	Pass
2607.675-2700	180	V	3	A	A	Pass
2607.675-2700	270	H	3	A	A	Pass
2607.675-2700	270	V	3	A	A	Pass

NR: No Requirement

☒ Meet criteria A: Operate as intended during and after the test
☐ Meet criteria B: Operate as intended after the test
☐ Meet criteria C: Loss/Error of function
☐ Additional Information
☐ EUT stopped operation and could / could not be reset by operator at ____ kV.
☒ No false alarms or other malfunctions were observed during or after the test.

Product	Scanner		
Test Item	Radiated susceptibility		
Test Mode	Mode 4: Scan to PC		
Date of Test	2013/09/05	Test Site	CB3

EN 55024

Frequency (MHz)	Position (Angle)	Polarity (H or V)	Field Strength (V/m)	Required Criteria	Complied To Criteria (A,B,C)	Results
80-1000	0	H	3	A	A	Pass
80-1000	0	V	3	A	A	Pass
80-1000	90	H	3	A	A	Pass
80-1000	90	V	3	A	A	Pass
80-1000	180	H	3	A	A	Pass
80-1000	180	V	3	A	A	Pass
80-1000	270	H	3	A	A	Pass
80-1000	270	V	3	A	A	Pass

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
  ☐ EUT stopped operation and could / could not be reset by operator at _____ V/m at frequency _____MHz.
  ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Scanner		
Test Item	Radiated susceptibility		
Test Mode	Mode 4: Scan to PC		
Date of Test	2013/09/05	Test Site	CB3

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Frequency (MHz)	Position (Angle)	Polarity (H or V)	Field Strength (V/m)	Required Criteria	Complied To Criteria (A,B,C)	Results
80-1000	0	H	3	A	A	Pass
80-1000	0	V	3	A	A	Pass
80-1000	90	H	3	A	A	Pass
80-1000	90	V	3	A	A	Pass
80-1000	180	H	3	A	A	Pass
80-1000	180	V	3	A	A	Pass
80-1000	270	H	3	A	A	Pass
80-1000	270	V	3	A	A	Pass
1400-2280	0	H	3	A	A	Pass
1400-2280	0	V	3	A	A	Pass
1400-2280	90	H	3	A	A	Pass
1400-2280	90	V	3	A	A	Pass
1400-2280	180	H	3	A	A	Pass
1400-2280	180	V	3	A	A	Pass
1400-2280	270	H	3	A	A	Pass
1400-2280	270	V	3	A	A	Pass
2607.675-2700	0	H	3	A	A	Pass
2607.675-2700	0	V	3	A	A	Pass
2607.675-2700	90	H	3	A	A	Pass
2607.675-2700	90	V	3	A	A	Pass
2607.675-2700	180	H	3	A	A	Pass
2607.675-2700	180	V	3	A	A	Pass
2607.675-2700	270	H	3	A	A	Pass
2607.675-2700	270	V	3	A	A	Pass

NR: No Requirement

☒ Meet criteria A: Operate as intended during and after the test
☐ Meet criteria B: Operate as intended after the test
☐ Meet criteria C: Loss/Error of function
☐ Additional Information
☐ EUT stopped operation and could / could not be reset by operator at ____ kV.
☒ No false alarms or other malfunctions were observed during or after the test.

Product	Scanner		
Test Item	Radiated susceptibility		
Test Mode	Mode 5: Charge		
Date of Test	2013/09/05	Test Site	CB3

EN 55024

Frequency (MHz)	Position (Angle)	Polarity (H or V)	Field Strength (V/m)	Required Criteria	Complied To Criteria (A,B,C)	Results
80-1000	0	H	3	A	A	Pass
80-1000	0	V	3	A	A	Pass
80-1000	90	H	3	A	A	Pass
80-1000	90	V	3	A	A	Pass
80-1000	180	H	3	A	A	Pass
80-1000	180	V	3	A	A	Pass
80-1000	270	H	3	A	A	Pass
80-1000	270	V	3	A	A	Pass

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
- ☐ EUT stopped operation and could / could not be reset by operator at _____ V/m at frequency _____MHz.
- ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Scanner		
Test Item	Radiated susceptibility		
Test Mode	Mode 5: Charge		
Date of Test	2013/09/05	Test Site	CB3

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Frequency (MHz)	Position (Angle)	Polarity (H or V)	Field Strength (V/m)	Required Criteria	Complied To Criteria (A,B,C)	Results
80-1000	0	H	3	A	A	Pass
80-1000	0	V	3	A	A	Pass
80-1000	90	H	3	A	A	Pass
80-1000	90	V	3	A	A	Pass
80-1000	180	H	3	A	A	Pass
80-1000	180	V	3	A	A	Pass
80-1000	270	H	3	A	A	Pass
80-1000	270	V	3	A	A	Pass
1400-2280	0	H	3	A	A	Pass
1400-2280	0	V	3	A	A	Pass
1400-2280	90	H	3	A	A	Pass
1400-2280	90	V	3	A	A	Pass
1400-2280	180	H	3	A	A	Pass
1400-2280	180	V	3	A	A	Pass
1400-2280	270	H	3	A	A	Pass
1400-2280	270	V	3	A	A	Pass
2607.675-2700	0	H	3	A	A	Pass
2607.675-2700	0	V	3	A	A	Pass
2607.675-2700	90	H	3	A	A	Pass
2607.675-2700	90	V	3	A	A	Pass
2607.675-2700	180	H	3	A	A	Pass
2607.675-2700	180	V	3	A	A	Pass
2607.675-2700	270	H	3	A	A	Pass
2607.675-2700	270	V	3	A	A	Pass

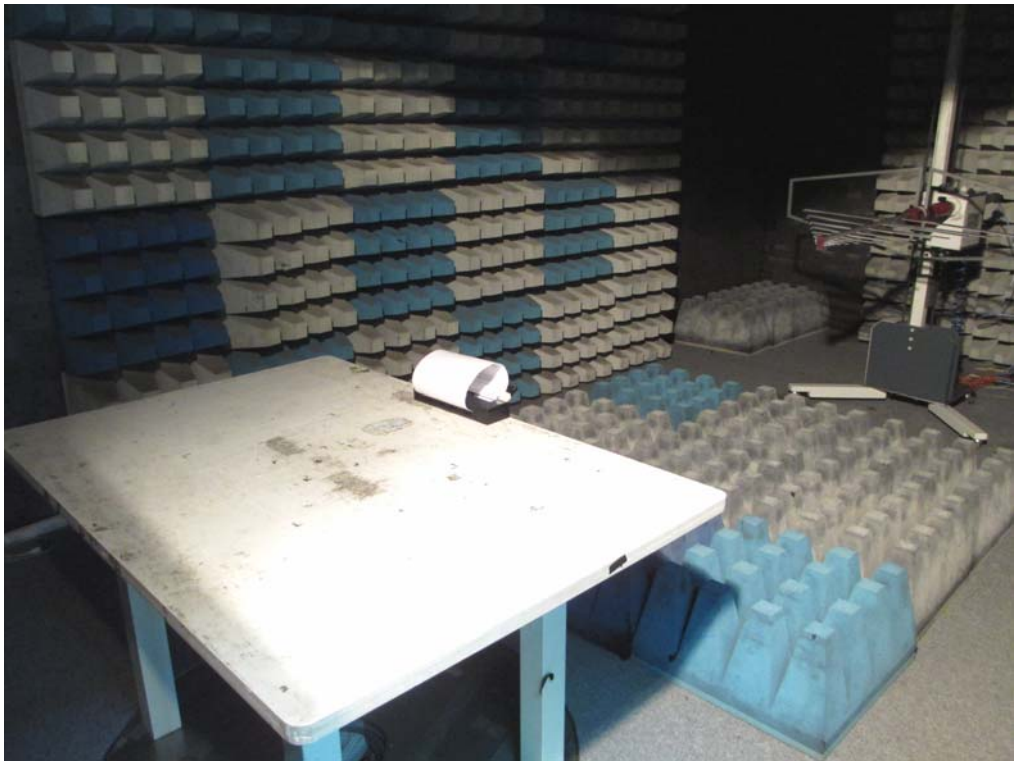
NR: No Requirement

☒ Meet criteria A: Operate as intended during and after the test
☐ Meet criteria B: Operate as intended after the test
☐ Meet criteria C: Loss/Error of function
☐ Additional Information
☐ EUT stopped operation and could / could not be reset by operator at ____ kV.
☒ No false alarms or other malfunctions were observed during or after the test.

8.7. Test Photograph

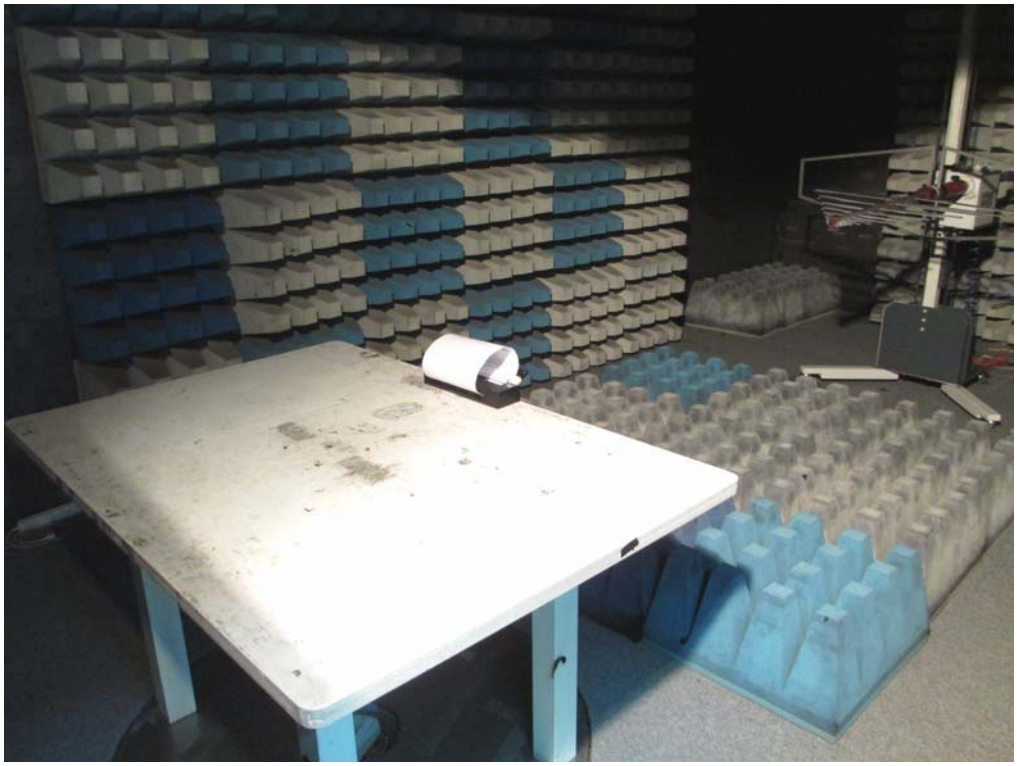
Test Mode : Mode 1: Scan to SD

Description : Radiated Susceptibility (RS) Test Setup



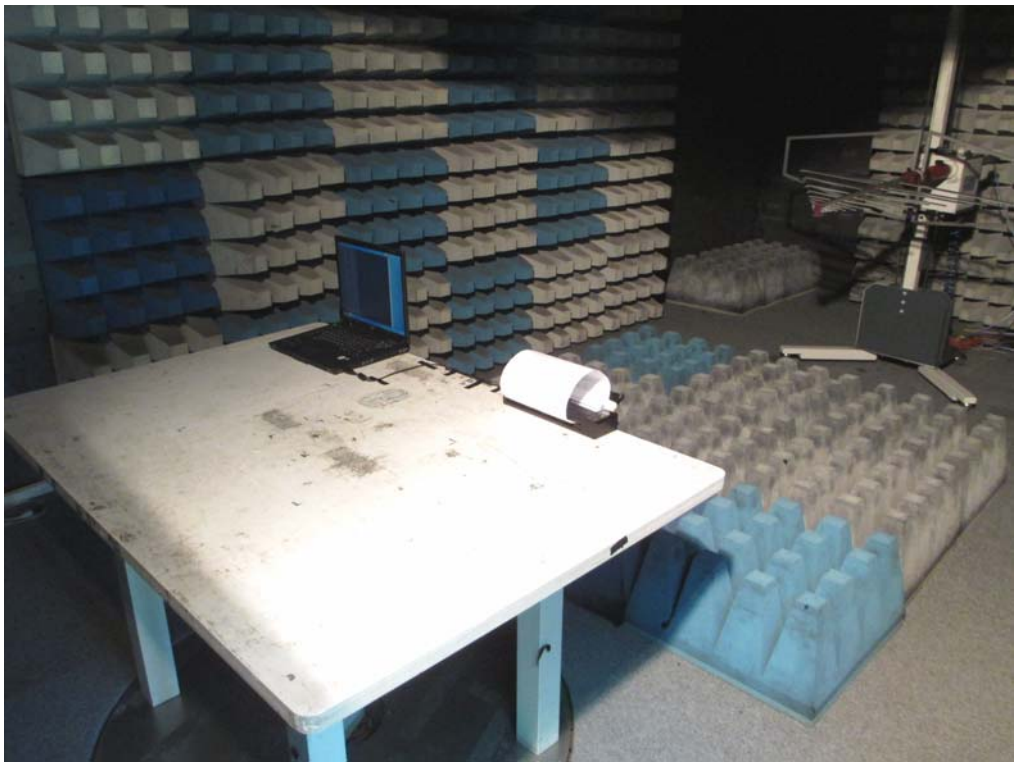
Test Mode : Mode 2: WiFi

Description : Radiated Susceptibility (RS) Test Setup



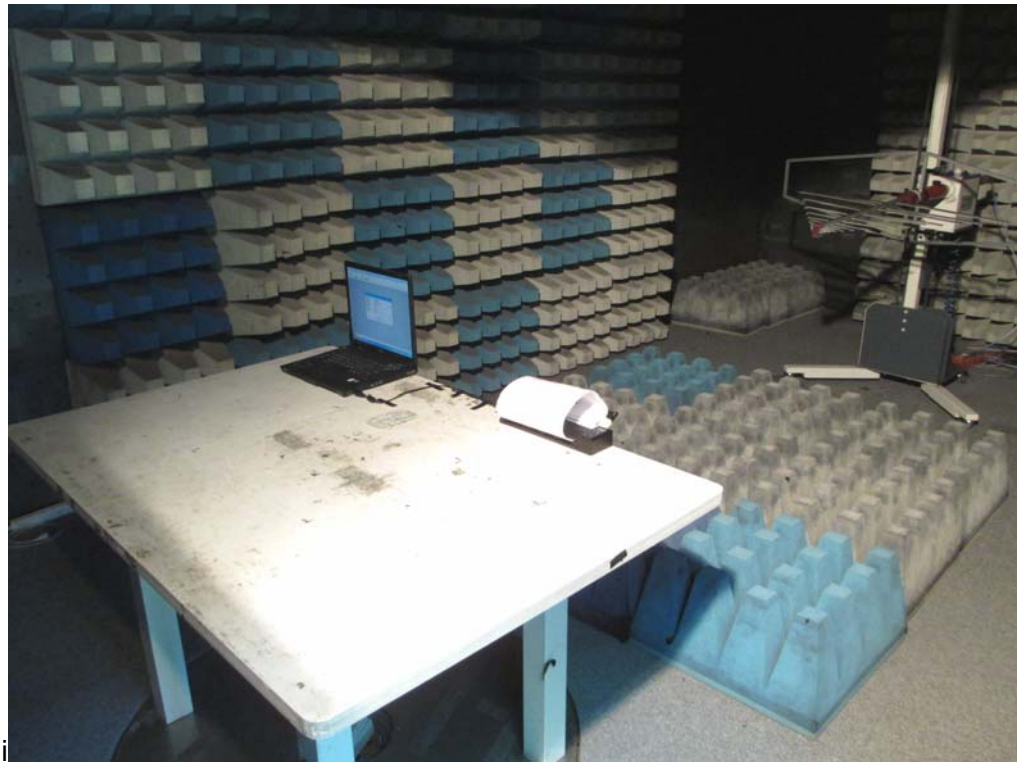
Test Mode : Mode 3: Read

Description : Radiated Susceptibility (RS) Test Setup



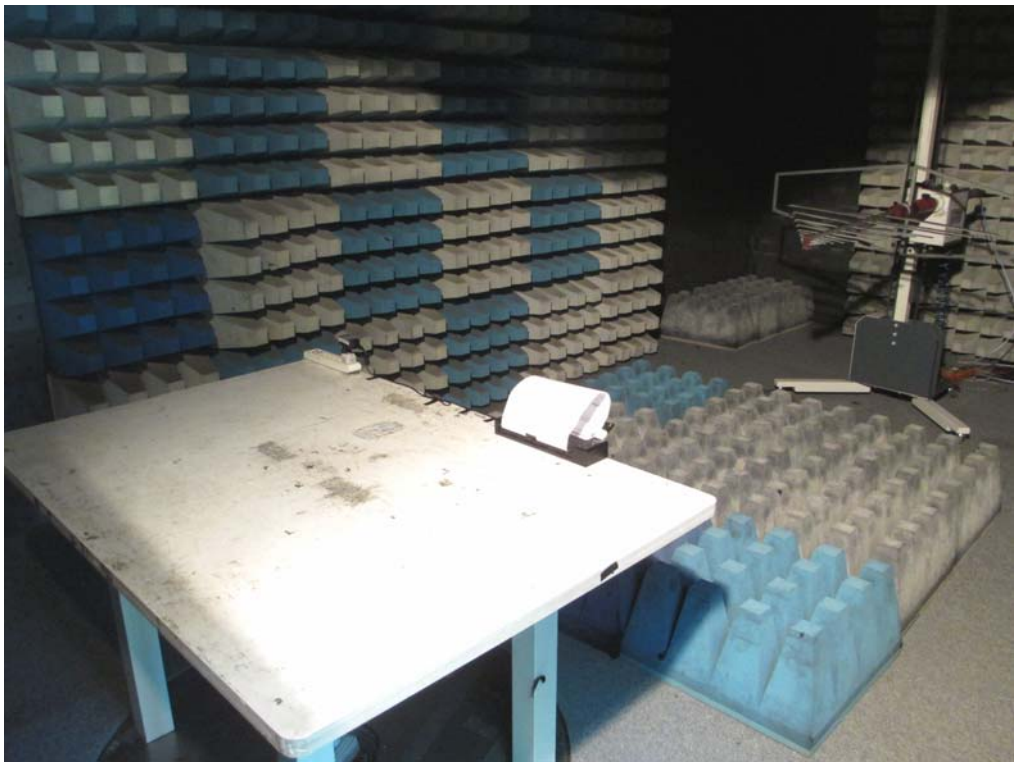
Test Mode : Mode 4: Scan to PC

Description : Radiated Susceptibility (RS) Test Setup



Test Mode : Mode 5: Charge

Description : Radiated Susceptibility (RS) Test Setup

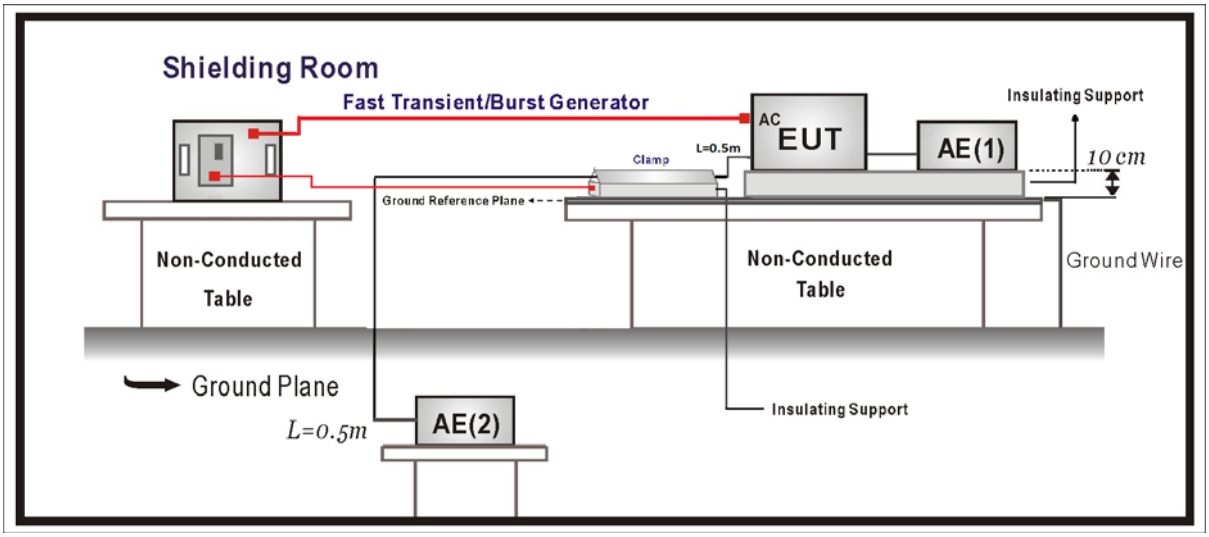


9. Electrical Fast Transient/Burst

9.1. Test Specification

According to Standard : IEC 61000-4-4 and EN 61000-4-4

9.2. Test Setup



9.3. Limit

EN 55024

Item	Environmental Phenomena	Units	Test Specification	Performance Criteria
I/O and Communication Ports(See 1)				
	Fast Transients Common Mode	kV (Peak)	±0.5	B
		Tr/Th ns	5/50	
		Rep. Frequency kHz	5	
Input DC Power Ports				
	Fast Transients Common Mode	kV (Peak)	±0.5	B
		Tr/Th ns	5/50	
		Rep. Frequency kHz	5	
Input AC Power Ports				
	Fast Transients Common Mode	kV (Peak)	±1	B
		Tr/Th ns	5/50	
		Rep. Frequency kHz	5	

Note:
1) For xDSL equipment, the repetition frequency for EFT testing shall be 100 kHz

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Item	Environmental Phenomena	Units	Test Specification	Performance Criteria
Signal Ports and Telecommunication Ports				
	Fast Transients Common Mode	kV (Peak)	±0.5	
		Tr/Th ns	5/50	B
		Rep. Frequency kHz	5	
Input DC Power Ports				
	Fast Transients Common Mode	kV (Peak)	±0.5	
		Tr/Th ns	5/50	B
		Rep. Frequency kHz	5	
Input AC Power Ports				
	Fast Transients Common Mode	kV (Peak)	±1	
		Tr/Th ns	5/50	B
		Rep. Frequency kHz	5	

9.4. Test Procedure

EN 55024

The EUT is placed on a table that is 0.8 meter height. A ground reference plane is placed on the table, and uses a 0.1m insulation between the EUT and ground reference plane.

The minimum area of the ground reference plane is 1m*1m, and 0.65mm thick min, and projected beyond the EUT by at least 0.1m on all sides.

Test on I/O and communication ports:

The EFT interference signal is through a coupling clamp device couples to the signal and control lines of the EUT with burst noise for 1minute.

Test on power supply ports:

The EUT is connected to the power mains through a coupling device that directly couples the EFT/B interference signal.

Each of the Line and Neutral conductors is impressed with burst noise for 1 minute.

The length of the signal and power lines between the coupling device and the EUT is 0.5m.

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The EUT and load are placed on a table that is 0.8 meter above a metal ground plane measured 1m*1m min. and 0.65mm thick min. And projected beyond the EUT by at least 0.1m on all sides.

For Signal Ports and Telecommunication Ports:
The EFT interference signal is through a coupling clamp device couples to the signal and control lines of the EUT with burst noise for 1min.

For Input DC and AC Power Ports:
The EUT is connected to the power mains through a coupling device that directly couples the EFT interference signal.

Each of the Line and Neutral conductors is impressed with burst noise for 1 min.
The length of power cord between the coupling device and the EUT shall be 0.5m ± 0.05m.

9.5. Deviation from Test Standard

No deviation.

9.6. Test Result

Product	Scanner		
Test Item	Electrical fast transient/burst		
Test Mode	Mode 3: Read		
Date of Test	2013/09/10	Test Site	SR1

EN 55024 & ETSI EN 301 489-1

Inject Line	Polarity	Voltage kV	Inject Time (Second)	Inject Method	Required Criteria	Complied to Criteria	Result
L	±	1	60	Direct	B	A	Pass
N	±	1	60	Direct	B	A	Pass
PE	±	1	60	Direct	B	A	Pass
L+N	±	1	60	Direct	B	A	Pass
L+PE	±	1	60	Direct	B	A	Pass
N+PE	±	1	60	Direct	B	A	Pass
L +N+PE	±	1	60	Direct	B	A	Pass

☒ Meet criteria A : Operate as intended during and after the test

☐ Meet criteria B : Operate as intended after the test

☐ Meet criteria C : Loss/Error of function

☐ Additional Information

☐ EUT stopped operation and could / could not be reset by operator at _____ kV of Line _____.

☒ No false alarms or other malfunctions were observed during or after the test.

Product	Scanner		
Test Item	Electrical fast transient/burst		
Test Mode	Mode 4: Scan to PC		
Date of Test	2013/09/10	Test Site	SR1

EN 55024 & ETSI EN 301 489-1

Inject Line	Polarity	Voltage kV	Inject Time (Second)	Inject Method	Required Criteria	Complied to Criteria	Result
L	±	1	60	Direct	B	A	Pass
N	±	1	60	Direct	B	A	Pass
PE	±	1	60	Direct	B	A	Pass
L+N	±	1	60	Direct	B	A	Pass
L+PE	±	1	60	Direct	B	A	Pass
N+PE	±	1	60	Direct	B	A	Pass
L +N+PE	±	1	60	Direct	B	A	Pass

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
☐ EUT stopped operation and could / could not be reset by operator at _____ kV of Line _____.
☒ No false alarms or other malfunctions were observed during or after the test.

Product	Scanner		
Test Item	Electrical fast transient/burst		
Test Mode	Mode 5: Charge		
Date of Test	2013/09/10	Test Site	SR1

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Inject Line	Polarity	Voltage kV	Inject Time (Second)	Inject Method	Required Criteria	Complied to Criteria	Result
L	±	1	60	Direct	B	A	Pass
N	±	1	60	Direct	B	A	Pass
L+N	±	1	60	Direct	B	A	Pass

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
☐ EUT stopped operation and could / could not be reset by operator at _____ kV of Line _____.
☒ No false alarms or other malfunctions were observed during or after the test.

9.7. Test Photograph

Test Mode : Mode 3: Read

Description : Electrical Fast Transient/Burst (EFT/B) Test Setup

Test Mode : Mode 4: Scan to PC

Description : Electrical Fast Transient/Burst (EFT/B) Test Setup

Test Mode : Mode 5: Charge

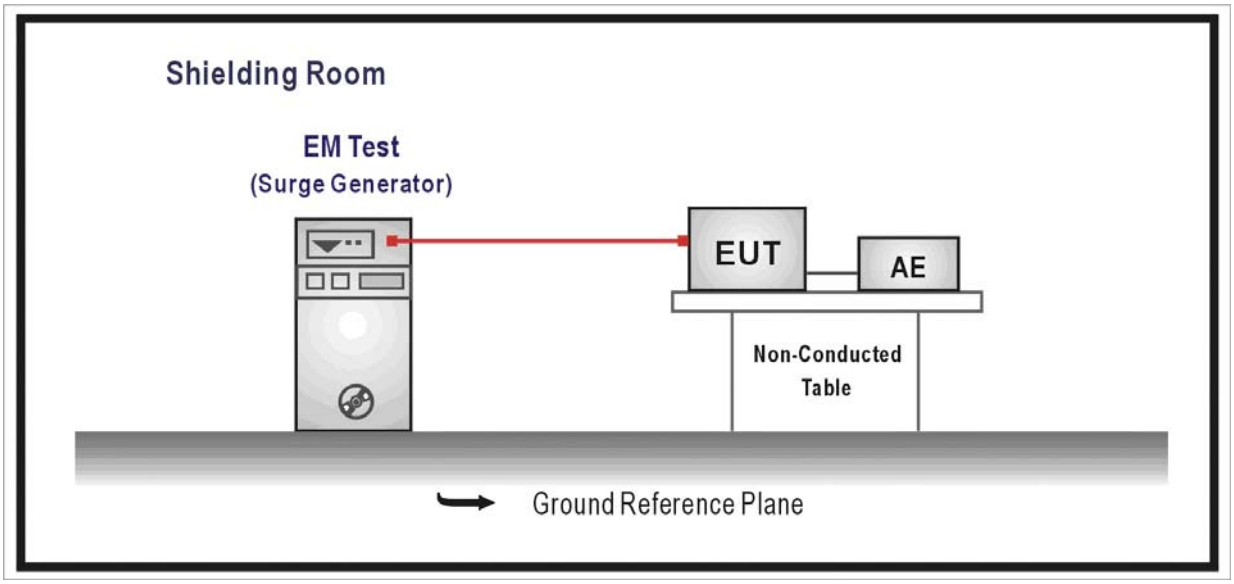
Description : Electrical Fast Transient/Burst (EFT/B) Test Setup

10. Surge

10.1. Test Specification

According to Standard : IEC 61000-4-5 and EN 61000-4-5

10.2. Test Setup



10.3. Limit

EN 55024

Item	Environmental Phenomena	Units	Test Specification	Performance Criteria
Signal Ports and Telecommunication Ports(See 1) and 2) and 3) and 4))				
	Surges	Tr/Th us	10/700	C
	Line to Ground	kV	± 1	
Input DC Power Ports				
	Surges	Tr/Th us	1.2/50 (8/20)	B
	Line to Ground	kV	± 0.5	
AC Input and AC Output Power Ports				
	Surges	Tr/Th us	1.2/50 (8/20)	B
	Line to Line	kV	± 1	
	Line to Ground	kV	± 2	

Notes:

1) Applicable only to ports which according to the manufacturer's may directly to outdoor Cables.
2) Where normal functioning cannot be achieved because of the impact of the CDN on the EUT, no immunity test shall be required.
3) For ports where primary protection is intended, surges are applied at voltages up to 4 kV with the primary protectors fitted. Otherwise the 1 kV test level is applied without primary protection in place.
4) Where the coupling network for the 10/700 μs waveform affects the functioning of high speed data ports, the test shall be carried out using a 1,2/50 (8/20) μs waveform and appropriate coupling network.

ETSI EN 301 489-1

Item	Environmental Phenomena	Units	Test Specification	Performance Criteria
Signal Ports and Telecommunication Ports (Connect to outdoor cable)				
	Surges	Tr/Th us	1.2/50 (8/20)	B
	Line to Ground	kV	± 1	
Signal Ports and Telecommunication Ports (Connect to indoor cable)				
	Surges	Tr/Th us	1.2/50 (8/20)	B
	Line to Ground	kV	± 0.5	
AC Input and AC Output Power Ports				
	Surges	Tr/Th us	1.2/50 (8/20)	
	Line to Line	kV	± 1	B
	Line to Ground	kV	± 2	

Notes:

5) Applicable only to ports which according to the manufacturer's may directly to outdoor Cables.

6) Where normal functioning cannot be achieved because of the impact of the CDN on the EUT, no immunity test shall be required.

10.4. Test Procedure

The EUT and its load are placed on a table that is 0.8 meter above a metal ground plane measured 1m*1m min. and 0.65mm thick min. And projected beyond the EUT by at least 0.1m on all sides. The length of power cord between the coupling device and the EUT shall be 2m or less.

For Input and Output AC Power or DC Input and DC Output Power Ports:

The EUT is connected to the power mains through a coupling device that directly couples the Surge interference signal.

The surge noise shall be applied synchronized to the voltage phase at 0^0, 90^0, 180^0, 270^0 and the peak value of the a.c. voltage wave. (Positive and negative)

Each of Line-Earth and Line-Line is impressed with a sequence of five surge voltages with interval of 1 min.

10.5. Deviation from Test Standard

No deviation.

10.6. Test Result

Product	Scanner		
Test Item	Surge		
Test Mode	Mode 3: Read		
Date of Test	2013/09/13	Test Site	SR1

EN 55024 & ETSI EN 301 489-1

Inject Line	Polarity	Angle	Voltage kV	Time Interval (Second)	Inject Method	Required Criteria	Complied to Criteria	Result
L-N	±	0	1	60	Direct	B	A	Pass
L-N	±	90	1	60	Direct	B	A	Pass
L-N	±	180	1	60	Direct	B	A	Pass
L-N	±	270	1	60	Direct	B	A	Pass
L-N	±	0	2	60	Direct	B	A	Pass
L-N	±	90	2	60	Direct	B	A	Pass
L-N	±	180	2	60	Direct	B	A	Pass
L-N	±	270	2	60	Direct	B	A	Pass
N-PE	±	0	2	60	Direct	B	A	Pass
N-PE	±	90	2	60	Direct	B	A	Pass
N-PE	±	180	2	60	Direct	B	A	Pass
N-PE	±	270	2	60	Direct	B	A	Pass

☒ Meet criteria A : Operate as intended during and after the test

☐ Meet criteria B : Operate as intended after the test

☐ Meet criteria C : Loss/Error of function

☐ Additional Information

☐ EUT stopped operation and could / could not be reset by operator at _____ kV of Line _____.

☒ No false alarms or other malfunctions were observed during or after the test.

Product	Scanner		
Test Item	Surge		
Test Mode	Mode 4: Scan to PC		
Date of Test	2013/09/13	Test Site	SR1

EN 55024 & ETSI EN 301 489-1

Inject Line	Polarity	Angle	Voltage kV	Time Interval (Second)	Inject Method	Required Criteria	Complied to Criteria	Result
L-N	±	0	1	60	Direct	B	A	Pass
L-N	±	90	1	60	Direct	B	A	Pass
L-N	±	180	1	60	Direct	B	A	Pass
L-N	±	270	1	60	Direct	B	A	Pass
L-N	±	0	2	60	Direct	B	A	Pass
L-N	±	90	2	60	Direct	B	A	Pass
L-N	±	180	2	60	Direct	B	A	Pass
L-N	±	270	2	60	Direct	B	A	Pass
N-PE	±	0	2	60	Direct	B	A	Pass
N-PE	±	90	2	60	Direct	B	A	Pass
N-PE	±	180	2	60	Direct	B	A	Pass
N-PE	±	270	2	60	Direct	B	A	Pass

☒ Meet criteria A : Operate as intended during and after the test

☐ Meet criteria B : Operate as intended after the test

☐ Meet criteria C : Loss/Error of function

☐ Additional Information

☐ EUT stopped operation and could / could not be reset by operator at _____ kV of Line _____.

☒ No false alarms or other malfunctions were observed during or after the test.

Product	Scanner		
Test Item	Surge		
Test Mode	Mode 5: Charge		
Date of Test	2013/09/13	Test Site	SR1

EN 55024 & ETSI EN 301 489-1

Inject Line	Polarity	Angle	Voltage kV	Time Interval (Second)	Inject Method	Required Criteria	Complied to Criteria	Result
L-N	±	0	1	60	Direct	B	A	Pass
L-N	±	90	1	60	Direct	B	A	Pass
L-N	±	180	1	60	Direct	B	A	Pass
L-N	±	270	1	60	Direct	B	A	Pass

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
  ☐ EUT stopped operation and could / could not be reset by operator at _____ kV of Line _____.
  ☒ No false alarms or other malfunctions were observed during or after the test.

10.7. Test Photograph

Test Mode : Mode 3: Read

Description : Surge Test Setup

Test Mode : Mode 4: Scan to PC

Description : Surge Test Setup

Test Mode : Mode 5: Charge

Description : Surge Test Setup

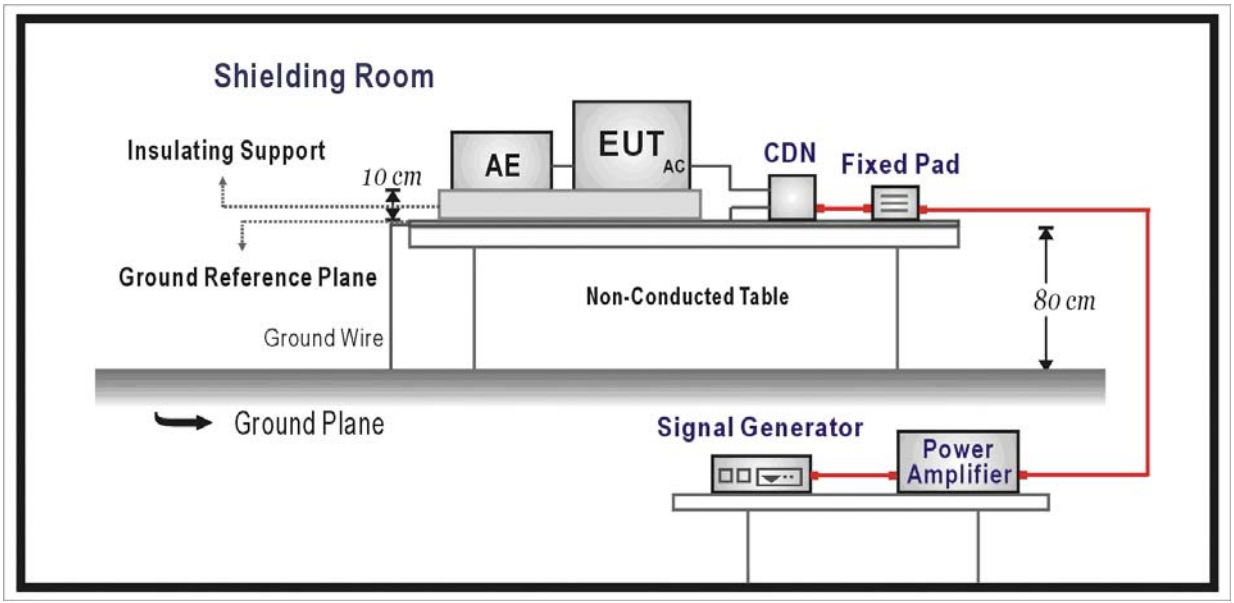
11. Conducted Susceptibility

11.1. Test Specification

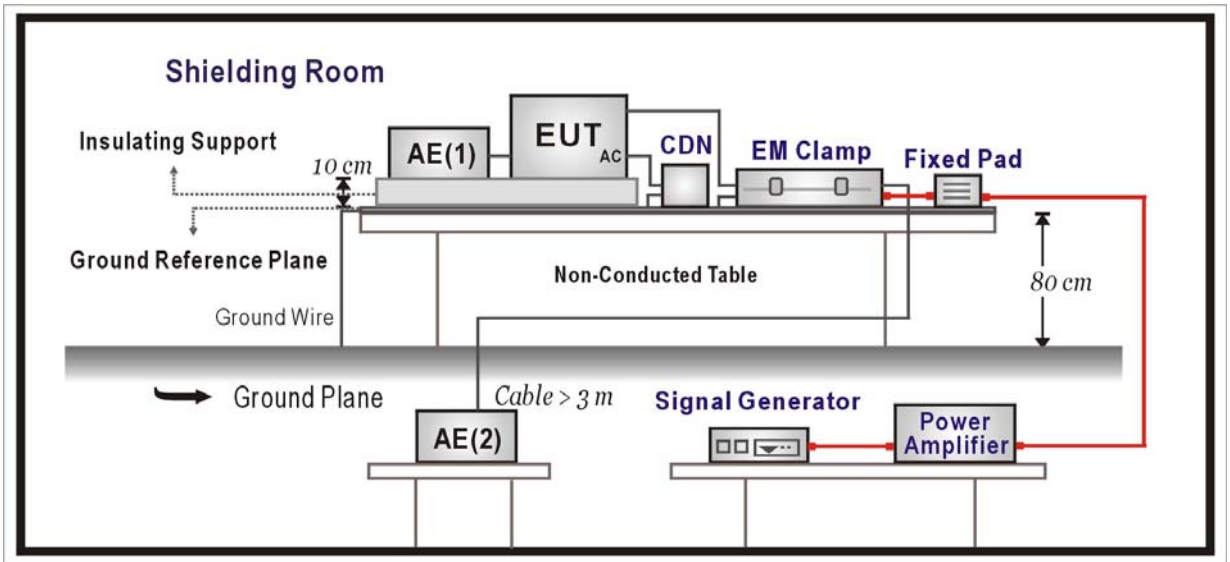
According to Standard : IEC 61000-4-6 and EN 61000-4-6

11.2. Test Setup

CDN Test Mode



EM Clamp Test Mode



11.3. Limit

EN 55024

Item	Environmental Phenomena	Units	Test Specification	Performance Criteria
Signal Ports and Telecommunication Ports				
	Radio-Frequency Continuous Conducted	MHz	0.15-80	
		V (rms, Un-modulated)	3	A
		% AM (1kHz)	80	
Input DC Power Ports				
	Radio-Frequency Continuous Conducted	MHz	0.15-80	
		V (rms, Un-modulated)	3	A
		% AM (1kHz)	80	
Input AC Power Ports				
	Radio-Frequency Continuous Conducted	MHz	0.15-80	
		V (rms, Un-modulated)	3	A
		% AM (1kHz)	80	

ETSI EN 301 489-1

Equipment operating in telecommunication centres:

Item	Environmental Phenomena	Units	Test Specification	Performance Criteria
Telecommunication centres, ports for outdoor signal lines				
	Radio-Frequency Common Mode. Amplitude Modulated	MHz V (rms, Unmodulated) % AM (1kHz) Source Impedance Ω	0.15-80 3 80 150	A
Telecommunication centres, ports for indoor signal lines				
	Radio-Frequency Common Mode. Amplitude Modulated	MHz V (rms, Unmodulated) % AM (1kHz) Source Impedance Ω	0.15-80 3 80 150	A
Telecommunication centres, AC power ports				
	Radio-Frequency Common Mode. Amplitude Modulated	MHz V (rms, Unmodulated) % AM (1kHz) Source Impedance Ω	0.15-80 3 80 150	A
Telecommunication centres, DC power ports				
	Radio-Frequency Common Mode. Amplitude Modulated	MHz V (rms, Unmodulated) % AM (1kHz) Source Impedance Ω	0.15-80 3 80 150	A

Equipment operating in locations other than telecommunication centres:

Item	Environmental Phenomena	Units	Test Specification	Performance Criteria
Other than telecommunication centres, ports for outdoor signal lines				
	Radio-Frequency Common Mode. Amplitude Modulated	MHz V (rms, Unmodulated) % AM (1kHz) Source Impedance Ω	0.15-80 3 80 150	A
Other than telecommunication centres, ports for indoor signal lines				
	Radio-Frequency Common Mode. Amplitude Modulated	MHz V (rms, Unmodulated) % AM (1kHz) Source Impedance Ω	0.15-80 3 80 150	A
Other than telecommunication centres, AC power ports				
	Radio-Frequency Common Mode. Amplitude Modulated	MHz V (rms, Unmodulated) % AM (1kHz) Source Impedance Ω	0.15-80 3 80 150	A
Other than telecommunication centres, DC power ports				
	Radio-Frequency Common Mode. Amplitude Modulated	MHz V (rms, Unmodulated) % AM (1kHz) Source Impedance Ω	0.15-80 3 80 150	A

11.4. Test Procedure

The EUT are placed on a table that is 0.8 meter height, and a Ground reference plane on the table, EUT are placed upon table and use a 10cm insulation between the EUT and Ground reference plane.
For Signal Ports and Telecommunication Ports
The disturbance signal is through a coupling and decoupling networks (CDN) or EM-clamp device couples to the signal and Telecommunication lines of the EUT.
For Input DC and AC Power Ports
The EUT is connected to the power mains through a coupling and decoupling networks for power supply lines. And directly couples the disturbances signal into EUT.
Used CDN-M2 for two wires or CDN-M3 for three wires.

All the scanning conditions are as follows:

	Condition of Test	Remarks
1.	Field Strength	130dBuV(3V) Level 2
2.	Radiated Signal	AM 80% Modulated with 1kHz
3.	Scanning Frequency	0.15MHz – 80MHz
4	Dwell Time	3 Seconds
5.	Frequency step size Δf :	1%

11.5. Deviation from Test Standard

No deviation.

11.6. Test Result

Product	Scanner		
Test Item	Conducted susceptibility		
Test Mode	Mode 3: Read		
Date of Test	2013/09/09	Test Site	SR4

EN 55024 & ETSI EN 301 489-1

Frequency Range (MHz)	Voltage Applied dBuV(V)	Inject Method	Tested Port of EUT	Required Criteria	Performance Criteria Complied To	Result
0.15~80	130 (3)	CDN	AC IN	A	A	Pass

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
  ☐ EUT stopped operation and could / could not be reset by operator at _____ dBuV(V) at frequency _____MHz.
  ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Scanner		
Test Item	Conducted susceptibility		
Test Mode	Mode 4: Scan to PC		
Date of Test	2013/09/09	Test Site	SR4

EN 55024 & ETSI EN 301 489-1

Frequency Range (MHz)	Voltage Applied dBuV(V)	Inject Method	Tested Port of EUT	Required Criteria	Performance Criteria Complied To	Result
0.15~80	130 (3)	CDN	AC IN	A	A	Pass

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
- ☐ EUT stopped operation and could / could not be reset by operator at _____ dBuV(V) at frequency _____MHz.
- ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Scanner		
Test Item	Conducted susceptibility		
Test Mode	Mode 5: Charge		
Date of Test	2013/09/09	Test Site	SR4

EN 55024 & ETSI EN 301 489-1

Frequency Range (MHz)	Voltage Applied dBuV(V)	Inject Method	Tested Port of EUT	Required Criteria	Performance Criteria Complied To	Result
0.15~80	130 (3)	CDN	AC IN	A	A	Pass

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
  ☐ EUT stopped operation and could / could not be reset by operator at _____ dBuV(V) at frequency _____MHz.
  ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

11.7. Test Photograph

Test Mode : Mode 3: Read

Description : Conducted Susceptibility (CS) Test Setup

Test Mode : Mode 4: Scan to PC

Description : Conducted Susceptibility (CS) Test Setup

Test Mode : Mode 5: Charge

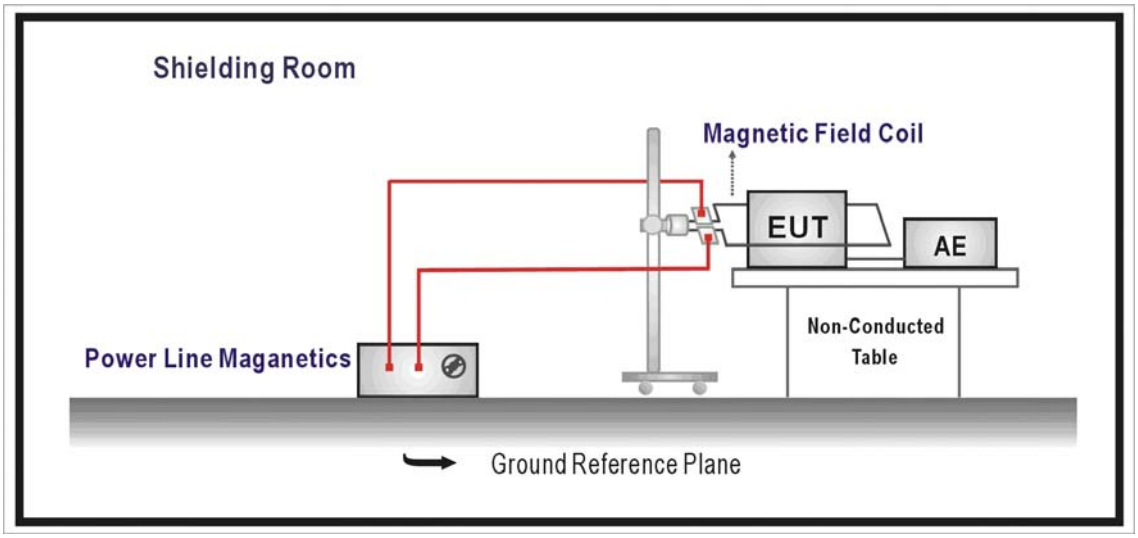
Description : Conducted Susceptibility (CS) Test Setup

12. Power Frequency Magnetic Field

12.1. Test Specification

According to Standard : IEC 61000-4-8

12.2. Test Setup



12.3. Limit

Item	Environmental Phenomena	Units	Test Specification	Performance Criteria
Enclosure Port				
	Power-Frequency Magnetic Field	Hz A/m (r.m.s.)	50 1	A

12.4. Test Procedure

The EUT and its load are placed on a table which is 0.8 meter above a metal ground plane measured at least 1m*1m min. The test magnetic field shall be placed at central of the induction coil.

The test magnetic Field shall be applied 1 minute by the immersion method to the EUT. And the induction coil shall be rotated by 90° in order to expose the EUT to the test field with different orientation (X, Y, Z Orientations).

12.5. Deviation from Test Standard

No deviation.

12.6. Test Result

Product	Scanner		
Test Item	Power frequency magnetic field		
Test Mode	Mode 1: Scan to SD		
Date of Test	2013/09/11	Test Site	SR1

Polarization	Frequency (Hz)	Magnetic Strength (A/m)	Required Performance Criteria	Performance Criteria Complied To	Test Result
X Orientation	50	1	A	A	Pass
Y Orientation	50	1	A	A	Pass
Z Orientation	50	1	A	A	Pass

☒ Meet criteria A : Operate as intended during and after the test

☐ Meet criteria B : Operate as intended after the test

☐ Meet criteria C : Loss/Error of function

☐ Additional Information

☐ EUT stopped operation and could / could not be reset by operator at _____ A/m.

☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Scanner		
Test Item	Power frequency magnetic field		
Test Mode	Mode 2: WiFi		
Date of Test	2013/09/11	Test Site	SR1

Polarization	Frequency (Hz)	Magnetic Strength (A/m)	Required Performance Criteria	Performance Criteria Complied To	Test Result
X Orientation	50	1	A	A	Pass
Y Orientation	50	1	A	A	Pass
Z Orientation	50	1	A	A	Pass

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
  ☐ EUT stopped operation and could / could not be reset by operator at _____ A/m.
  ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Scanner		
Test Item	Power frequency magnetic field		
Test Mode	Mode 3: Read		
Date of Test	2013/09/11	Test Site	SR1

Polarization	Frequency (Hz)	Magnetic Strength (A/m)	Required Performance Criteria	Performance Criteria Complied To	Test Result
X Orientation	50	1	A	A	Pass
Y Orientation	50	1	A	A	Pass
Z Orientation	50	1	A	A	Pass

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
  ☐ EUT stopped operation and could / could not be reset by operator at _____ A/m.
  ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Scanner		
Test Item	Power frequency magnetic field		
Test Mode	Mode 4: Scan to PC		
Date of Test	2013/09/11	Test Site	SR1

Polarization	Frequency (Hz)	Magnetic Strength (A/m)	Required Performance Criteria	Performance Criteria Complied To	Test Result
X Orientation	50	1	A	A	Pass
Y Orientation	50	1	A	A	Pass
Z Orientation	50	1	A	A	Pass

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
  ☐ EUT stopped operation and could / could not be reset by operator at _____ A/m.
  ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Scanner		
Test Item	Power frequency magnetic field		
Test Mode	Mode 5: Charge		
Date of Test	2013/09/11	Test Site	SR1

Polarization	Frequency (Hz)	Magnetic Strength (A/m)	Required Performance Criteria	Performance Criteria Complied To	Test Result
X Orientation	50	1	A	A	Pass
Y Orientation	50	1	A	A	Pass
Z Orientation	50	1	A	A	Pass

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
  ☐ EUT stopped operation and could / could not be reset by operator at _____ A/m.
  ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

12.7. Test Photograph

Test Mode : Mode 1: Scan to SD

Description : Power Frequency Magnetic Field Test Setup

Test Mode : Mode 2: WiFi

Description : Power Frequency Magnetic Field Test Setup

Test Mode　: Mode 3: Read

Description　: Power Frequency Magnetic Field Test Setup

Test Mode　: Mode 4: Scan to PC

Description　: Power Frequency Magnetic Field Test Setup

Test Mode : Mode 5: Charge

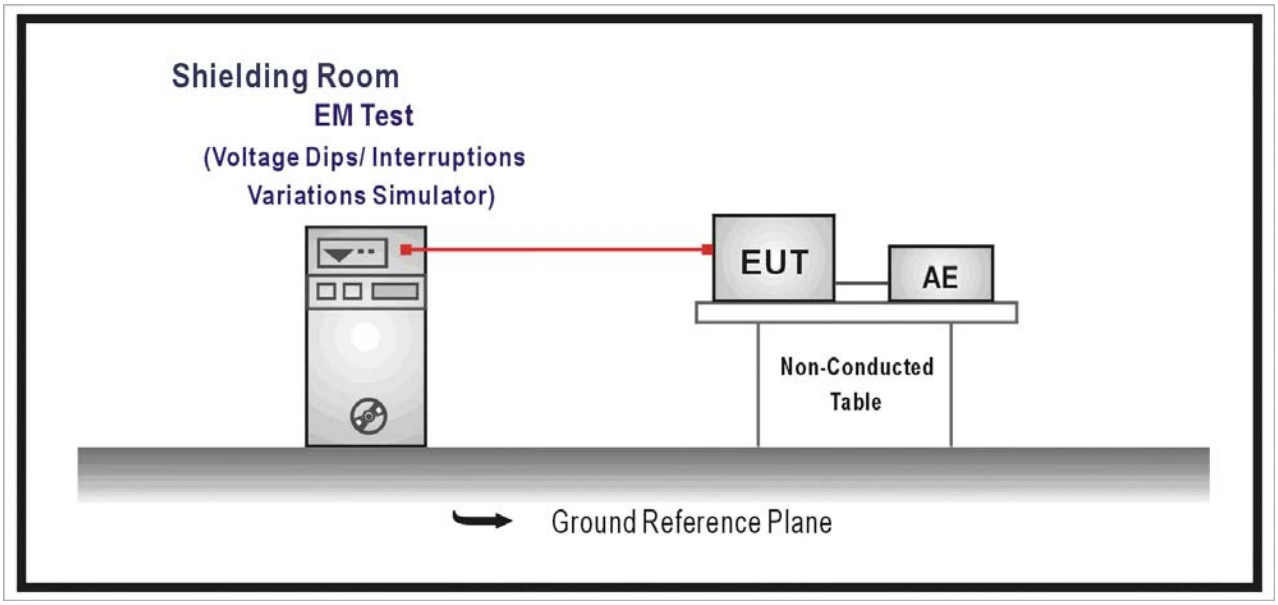
Description : Power Frequency Magnetic Field Test Setup

13. Voltage Dips and Interruption

13.1. Test Specification

According to Standard : IEC 61000-4-11 and EN 61000-4-11

13.2. Test Setup



13.3. Limit

EN 55024

Item	Environmental Phenomena	Units	Test Specification	Performance Criteria
Input	AC Power Ports			
	Voltage Dips	% Reduction	30	C
		Period	25	
		% Reduction	>95	B
		Period	0.5	
	Voltage Interruptions	% Reduction	>95	C
		Period	250	

ETSI EN 301 489-1

Item	Environmental Phenomena	Units	Test Specification	Performance Criteria
Input	AC Power Ports			
	Voltage Dips	% Residual	0	B
		Cycle	0.5	
	Voltage Dips	% Residual	0	B
		Cycle	1	
	Voltage Dips	% Residual	70	B
		Cycle	25	
	Voltage Interruptions	% Residual	0	C
		Cycle	250	

13.4. Test Procedure

The EUT and its load are placed on a table which is 0.8 meter above a metal ground plane measured 1m*1m min. And 0.65mm thick min. And projected beyond the EUT by at least 0.1m on all sides. The power cord shall be used the shortest power cord as specified by the manufacturer.

For Voltage Dips/ Interruptions test:

The selection of test voltage is based on the rated power range. If the operation range is large than 20% of lower power range, both end of specified voltage shall be tested. Otherwise, the typical voltage specification is selected as test voltage.

The EUT is connected to the power mains through a coupling device that directly couples to the Voltage Dips and Interruption Generator.

EN 55024

The EUT shall be tested for 30% voltage dip of supplied voltage and duration 25 Periods, for 95% voltage dip of supplied voltage and duration 0.5 Periods with a sequence of three voltage dips with intervals of 10 seconds, and for 95% voltage interruption of supplied voltage and duration 250 Periods with a sequence of three voltage interruptions with intervals of 10 seconds.

ETSI EN 301 489-1

The EUT shall be tested for 100% voltage dip of supplied voltage and duration 0.5 Periods, for 100% voltage dip of supplied voltage and duration 1 Periods with a sequence of three voltage dips with intervals of 10 seconds, and for 30% voltage interruption of supplied voltage and duration 25 Periods, and for 100% voltage interruption of supplied voltage and duration 250 Periods with a sequence of three voltage interruptions with intervals of 10 seconds.

Voltage phase shifting are shall occur at 0^0, 45^0, 90^0 ,135^0 ,180^0 ,225^0, 270^0 ,315^0 of the voltage.

13.5. Deviation from Test Standard

No deviation.

13.6. Test Result

Product	Scanner		
Test Item	Voltage dips and interruption		
Test Mode	Mode 3: Read		
Date of Test	2013/09/11	Test Site	SR1

EN 55024 (AC 100V/50Hz)

Voltage Dips and Interruption Reduction(%)	Angle	Test Duration (Periods)	Required Performance Criteria	Performance Criteria Complied To	Test Result
30	0	25	C	A	Pass
30	45	25	C	A	Pass
30	90	25	C	A	Pass
30	135	25	C	A	Pass
30	180	25	C	A	Pass
30	225	25	C	A	Pass
30	270	25	C	A	Pass
30	315	25	C	A	Pass
>95	0	0.5	B	A	Pass
>95	45	0.5	B	A	Pass
>95	90	0.5	B	A	Pass
>95	135	0.5	B	A	Pass
>95	180	0.5	B	A	Pass
>95	225	0.5	B	A	Pass
>95	270	0.5	B	A	Pass
>95	315	0.5	B	A	Pass
>95	0	250	C	A	Pass
>95	45	250	C	A	Pass
>95	90	250	C	A	Pass
>95	135	250	C	A	Pass
>95	180	250	C	A	Pass
>95	225	250	C	A	Pass
>95	270	250	C	A	Pass
>95	315	250	C	A	Pass

☒ Meet criteria A : Operate as intended during and after the test

☐ Meet criteria B : Operate as intended after the test

☐ Meet criteria C : Loss/Error of function

☐ Additional Information

- ☐ The nominal voltage of EUT is 230V.
- ☐ EUT stopped operation and could / could not be reset by operator at _____.
- ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Scanner		
Test Item	Voltage dips and interruption		
Test Mode	Mode 3: Read		
Date of Test	2013/09/11	Test Site	SR1

EN 55024 (AC 240V/50Hz)

Voltage Dips and Interruption Reduction(%)	Angle	Test Duration (Periods)	Required Performance Criteria	Performance Criteria Complied To	Test Result
30	0	25	C	A	Pass
30	45	25	C	A	Pass
30	90	25	C	A	Pass
30	135	25	C	A	Pass
30	180	25	C	A	Pass
30	225	25	C	A	Pass
30	270	25	C	A	Pass
30	315	25	C	A	Pass
>95	0	0.5	B	A	Pass
>95	45	0.5	B	A	Pass
>95	90	0.5	B	A	Pass
>95	135	0.5	B	A	Pass
>95	180	0.5	B	A	Pass
>95	225	0.5	B	A	Pass
>95	270	0.5	B	A	Pass
>95	315	0.5	B	A	Pass
>95	0	250	C	A	Pass
>95	45	250	C	A	Pass
>95	90	250	C	A	Pass
>95	135	250	C	A	Pass
>95	180	250	C	A	Pass
>95	225	250	C	A	Pass
>95	270	250	C	A	Pass
>95	315	250	C	A	Pass

☒ Meet criteria A : Operate as intended during and after the test

☐ Meet criteria B : Operate as intended after the test

☐ Meet criteria C : Loss/Error of function

☐ Additional Information

- ☐ The nominal voltage of EUT is 230V.
- ☐ EUT stopped operation and could / could not be reset by operator at _____.
- ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Scanner		
Test Item	Voltage dips and interruption		
Test Mode	Mode 3: Read		
Date of Test	2013/09/11	Test Site	SR1

ETSI EN 301 489-1(AC 100V/50Hz)

Voltage Dips and Interruption Residual(%)	Angle	Test Duration (Periods)	Required Performance Criteria	Performance Criteria Complied To	Test Result
0	0	0.5	B	A	Pass
0	45	0.5	B	A	Pass
0	90	0.5	B	A	Pass
0	135	0.5	B	A	Pass
0	180	0.5	B	A	Pass
0	225	0.5	B	A	Pass
0	270	0.5	B	A	Pass
0	315	0.5	B	A	Pass
0	0	1	B	A	Pass
0	45	1	B	A	Pass
0	90	1	B	A	Pass
0	135	1	B	A	Pass
0	180	1	B	A	Pass
0	225	1	B	A	Pass
0	270	1	B	A	Pass
0	315	1	B	A	Pass
30	0	25	B	A	Pass
30	45	25	B	A	Pass
30	90	25	B	A	Pass
30	135	25	B	A	Pass
30	180	25	B	A	Pass
30	225	25	B	A	Pass
30	270	25	B	A	Pass
30	315	25	B	A	Pass
0	0	250	C	A	Pass
0	45	250	C	A	Pass
0	90	250	C	A	Pass
0	135	250	C	A	Pass
0	180	250	C	A	Pass
0	225	250	C	A	Pass
0	270	250	C	A	Pass
0	315	250	C	A	Pass

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
- ☐ The nominal voltage of EUT is 230V.
- ☐ EUT stopped operation and could / could not be reset by operator at _____.
- ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Scanner		
Test Item	Voltage dips and interruption		
Test Mode	Mode 3: Read		
Date of Test	2013/09/11	Test Site	SR1

ETSI EN 301 489-1(AC 240V/50Hz)

Voltage Dips and Interruption Residual(%)	Angle	Test Duration (Periods)	Required Performance Criteria	Performance Criteria Complied To	Test Result
0	0	0.5	B	A	Pass
0	45	0.5	B	A	Pass
0	90	0.5	B	A	Pass
0	135	0.5	B	A	Pass
0	180	0.5	B	A	Pass
0	225	0.5	B	A	Pass
0	270	0.5	B	A	Pass
0	315	0.5	B	A	Pass
0	0	1	B	A	Pass
0	45	1	B	A	Pass
0	90	1	B	A	Pass
0	135	1	B	A	Pass
0	180	1	B	A	Pass
0	225	1	B	A	Pass
0	270	1	B	A	Pass
0	315	1	B	A	Pass
30	0	25	B	A	Pass
30	45	25	B	A	Pass
30	90	25	B	A	Pass
30	135	25	B	A	Pass
30	180	25	B	A	Pass
30	225	25	B	A	Pass
30	270	25	B	A	Pass
30	315	25	B	A	Pass
0	0	250	C	A	Pass
0	45	250	C	A	Pass
0	90	250	C	A	Pass
0	135	250	C	A	Pass
0	180	250	C	A	Pass
0	225	250	C	A	Pass
0	270	250	C	A	Pass
0	315	250	C	A	Pass

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
- ☐ The nominal voltage of EUT is 230V.
- ☐ EUT stopped operation and could / could not be reset by operator at _____.
- ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Scanner		
Test Item	Voltage dips and interruption		
Test Mode	Mode 4: Scan to PC		
Date of Test	2013/09/11	Test Site	SR1

EN 55024 (AC 100V/50Hz)

Voltage Dips and Interruption Reduction(%)	Angle	Test Duration (Periods)	Required Performance Criteria	Performance Criteria Complied To	Test Result
30	0	25	C	A	Pass
30	45	25	C	A	Pass
30	90	25	C	A	Pass
30	135	25	C	A	Pass
30	180	25	C	A	Pass
30	225	25	C	A	Pass
30	270	25	C	A	Pass
30	315	25	C	A	Pass
>95	0	0.5	B	A	Pass
>95	45	0.5	B	A	Pass
>95	90	0.5	B	A	Pass
>95	135	0.5	B	A	Pass
>95	180	0.5	B	A	Pass
>95	225	0.5	B	A	Pass
>95	270	0.5	B	A	Pass
>95	315	0.5	B	A	Pass
>95	0	250	C	A	Pass
>95	45	250	C	A	Pass
>95	90	250	C	A	Pass
>95	135	250	C	A	Pass
>95	180	250	C	A	Pass
>95	225	250	C	A	Pass
>95	270	250	C	A	Pass
>95	315	250	C	A	Pass

☒ Meet criteria A : Operate as intended during and after the test

☐ Meet criteria B : Operate as intended after the test

☐ Meet criteria C : Loss/Error of function

☐ Additional Information

- ☐ The nominal voltage of EUT is 230V.
- ☐ EUT stopped operation and could / could not be reset by operator at _____.
- ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Scanner		
Test Item	Voltage dips and interruption		
Test Mode	Mode 4: Scan to PC		
Date of Test	2013/09/11	Test Site	SR1

EN 55024 (AC 240V/50Hz)

Voltage Dips and Interruption Reduction(%)	Angle	Test Duration (Periods)	Required Performance Criteria	Performance Criteria Complied To	Test Result
30	0	25	C	A	Pass
30	45	25	C	A	Pass
30	90	25	C	A	Pass
30	135	25	C	A	Pass
30	180	25	C	A	Pass
30	225	25	C	A	Pass
30	270	25	C	A	Pass
30	315	25	C	A	Pass
>95	0	0.5	B	A	Pass
>95	45	0.5	B	A	Pass
>95	90	0.5	B	A	Pass
>95	135	0.5	B	A	Pass
>95	180	0.5	B	A	Pass
>95	225	0.5	B	A	Pass
>95	270	0.5	B	A	Pass
>95	315	0.5	B	A	Pass
>95	0	250	C	A	Pass
>95	45	250	C	A	Pass
>95	90	250	C	A	Pass
>95	135	250	C	A	Pass
>95	180	250	C	A	Pass
>95	225	250	C	A	Pass
>95	270	250	C	A	Pass
>95	315	250	C	A	Pass

☒ Meet criteria A : Operate as intended during and after the test

☐ Meet criteria B : Operate as intended after the test

☐ Meet criteria C : Loss/Error of function

☐ Additional Information

- ☐ The nominal voltage of EUT is 230V.
- ☐ EUT stopped operation and could / could not be reset by operator at _____.
- ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Scanner		
Test Item	Voltage dips and interruption		
Test Mode	Mode 4: Scan to PC		
Date of Test	2013/09/11	Test Site	SR1

ETSI EN 301 489-1(AC 100V/50Hz)

Voltage Dips and Interruption Residual(%)	Angle	Test Duration (Periods)	Required Performance Criteria	Performance Criteria Complied To	Test Result
0	0	0.5	B	A	Pass
0	45	0.5	B	A	Pass
0	90	0.5	B	A	Pass
0	135	0.5	B	A	Pass
0	180	0.5	B	A	Pass
0	225	0.5	B	A	Pass
0	270	0.5	B	A	Pass
0	315	0.5	B	A	Pass
0	0	1	B	A	Pass
0	45	1	B	A	Pass
0	90	1	B	A	Pass
0	135	1	B	A	Pass
0	180	1	B	A	Pass
0	225	1	B	A	Pass
0	270	1	B	A	Pass
0	315	1	B	A	Pass
30	0	25	B	A	Pass
30	45	25	B	A	Pass
30	90	25	B	A	Pass
30	135	25	B	A	Pass
30	180	25	B	A	Pass
30	225	25	B	A	Pass
30	270	25	B	A	Pass
30	315	25	B	A	Pass
0	0	250	C	A	Pass
0	45	250	C	A	Pass
0	90	250	C	A	Pass
0	135	250	C	A	Pass
0	180	250	C	A	Pass
0	225	250	C	A	Pass
0	270	250	C	A	Pass
0	315	250	C	A	Pass

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
- ☐ The nominal voltage of EUT is 230V.
- ☐ EUT stopped operation and could / could not be reset by operator at _____.
- ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Scanner		
Test Item	Voltage dips and interruption		
Test Mode	Mode 4: Scan to PC		
Date of Test	2013/09/11	Test Site	SR1

ETSI EN 301 489-1(AC 240V/50Hz)

Voltage Dips and Interruption Residual(%)	Angle	Test Duration (Periods)	Required Performance Criteria	Performance Criteria Complied To	Test Result
0	0	0.5	B	A	Pass
0	45	0.5	B	A	Pass
0	90	0.5	B	A	Pass
0	135	0.5	B	A	Pass
0	180	0.5	B	A	Pass
0	225	0.5	B	A	Pass
0	270	0.5	B	A	Pass
0	315	0.5	B	A	Pass
0	0	1	B	A	Pass
0	45	1	B	A	Pass
0	90	1	B	A	Pass
0	135	1	B	A	Pass
0	180	1	B	A	Pass
0	225	1	B	A	Pass
0	270	1	B	A	Pass
0	315	1	B	A	Pass
30	0	25	B	A	Pass
30	45	25	B	A	Pass
30	90	25	B	A	Pass
30	135	25	B	A	Pass
30	180	25	B	A	Pass
30	225	25	B	A	Pass
30	270	25	B	A	Pass
30	315	25	B	A	Pass
0	0	250	C	A	Pass
0	45	250	C	A	Pass
0	90	250	C	A	Pass
0	135	250	C	A	Pass
0	180	250	C	A	Pass
0	225	250	C	A	Pass
0	270	250	C	A	Pass
0	315	250	C	A	Pass

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
- ☐ The nominal voltage of EUT is 230V.
- ☐ EUT stopped operation and could / could not be reset by operator at _____.
- ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Scanner		
Test Item	Voltage dips and interruption		
Test Mode	Mode 5: Charge		
Date of Test	2013/09/11	Test Site	SR1

EN 55024 (AC 100V/50Hz)

Voltage Dips and Interruption Reduction(%)	Angle	Test Duration (Periods)	Required Performance Criteria	Performance Criteria Complied To	Test Result
30	0	25	C	A	Pass
30	45	25	C	A	Pass
30	90	25	C	A	Pass
30	135	25	C	A	Pass
30	180	25	C	A	Pass
30	225	25	C	A	Pass
30	270	25	C	A	Pass
30	315	25	C	A	Pass
>95	0	0.5	B	A	Pass
>95	45	0.5	B	A	Pass
>95	90	0.5	B	A	Pass
>95	135	0.5	B	A	Pass
>95	180	0.5	B	A	Pass
>95	225	0.5	B	A	Pass
>95	270	0.5	B	A	Pass
>95	315	0.5	B	A	Pass
>95	0	250	C	B	Pass
>95	45	250	C	B	Pass
>95	90	250	C	B	Pass
>95	135	250	C	B	Pass
>95	180	250	C	B	Pass
>95	225	250	C	B	Pass
>95	270	250	C	B	Pass
>95	315	250	C	B	Pass

☒ Meet criteria A : Operate as intended during and after the test

☒ Meet criteria B : Operate as intended after the test

☐ Meet criteria C : Loss/Error of function

☐ Additional Information

- ☐ The nominal voltage of EUT is 230V.
- ☐ EUT stopped operation and could / could not be reset by operator at _____.
- ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Scanner		
Test Item	Voltage dips and interruption		
Test Mode	Mode 5: Charge		
Date of Test	2013/09/11	Test Site	SR1

EN 55024 (AC 240V/50Hz)

Voltage Dips and Interruption Reduction(%)	Angle	Test Duration (Periods)	Required Performance Criteria	Performance Criteria Complied To	Test Result
30	0	25	C	A	Pass
30	45	25	C	A	Pass
30	90	25	C	A	Pass
30	135	25	C	A	Pass
30	180	25	C	A	Pass
30	225	25	C	A	Pass
30	270	25	C	A	Pass
30	315	25	C	A	Pass
>95	0	0.5	B	A	Pass
>95	45	0.5	B	A	Pass
>95	90	0.5	B	A	Pass
>95	135	0.5	B	A	Pass
>95	180	0.5	B	A	Pass
>95	225	0.5	B	A	Pass
>95	270	0.5	B	A	Pass
>95	315	0.5	B	A	Pass
>95	0	250	C	B	Pass
>95	45	250	C	B	Pass
>95	90	250	C	B	Pass
>95	135	250	C	B	Pass
>95	180	250	C	B	Pass
>95	225	250	C	B	Pass
>95	270	250	C	B	Pass
>95	315	250	C	B	Pass

☒ Meet criteria A : Operate as intended during and after the test

☐ Meet criteria B : Operate as intended after the test

☐ Meet criteria C : Loss/Error of function

☐ Additional Information

- ☐ The nominal voltage of EUT is 230V.
- ☐ EUT stopped operation and could / could not be reset by operator at _____.
- ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Scanner		
Test Item	Voltage dips and interruption		
Test Mode	Mode 5: Charge		
Date of Test	2013/09/11	Test Site	SR1

ETSI EN 301 489-1(AC 100V/50Hz)

Voltage Dips and Interruption Residual(%)	Angle	Test Duration (Periods)	Required Performance Criteria	Performance Criteria Complied To	Test Result
0	0	0.5	B	A	Pass
0	45	0.5	B	A	Pass
0	90	0.5	B	A	Pass
0	135	0.5	B	A	Pass
0	180	0.5	B	A	Pass
0	225	0.5	B	A	Pass
0	270	0.5	B	A	Pass
0	315	0.5	B	A	Pass
0	0	1	B	A	Pass
0	45	1	B	A	Pass
0	90	1	B	A	Pass
0	135	1	B	A	Pass
0	180	1	B	A	Pass
0	225	1	B	A	Pass
0	270	1	B	A	Pass
0	315	1	B	A	Pass
30	0	25	B	A	Pass
30	45	25	B	A	Pass
30	90	25	B	A	Pass
30	135	25	B	A	Pass
30	180	25	B	A	Pass
30	225	25	B	A	Pass
30	270	25	B	A	Pass
30	315	25	B	A	Pass
0	0	250	C	A	Pass
0	45	250	C	A	Pass
0	90	250	C	A	Pass
0	135	250	C	A	Pass
0	180	250	C	A	Pass
0	225	250	C	A	Pass
0	270	250	C	A	Pass
0	315	250	C	A	Pass

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
- ☐ The nominal voltage of EUT is 230V.
- ☐ EUT stopped operation and could / could not be reset by operator at _____.
- ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Scanner		
Test Item	Voltage dips and interruption		
Test Mode	Mode 5: Charge		
Date of Test	2013/09/11	Test Site	SR1

ETSI EN 301 489-1(AC 240V/50Hz)

Voltage Dips and Interruption Residual(%)	Angle	Test Duration (Periods)	Required Performance Criteria	Performance Criteria Complied To	Test Result
0	0	0.5	B	A	Pass
0	45	0.5	B	A	Pass
0	90	0.5	B	A	Pass
0	135	0.5	B	A	Pass
0	180	0.5	B	A	Pass
0	225	0.5	B	A	Pass
0	270	0.5	B	A	Pass
0	315	0.5	B	A	Pass
0	0	1	B	A	Pass
0	45	1	B	A	Pass
0	90	1	B	A	Pass
0	135	1	B	A	Pass
0	180	1	B	A	Pass
0	225	1	B	A	Pass
0	270	1	B	A	Pass
0	315	1	B	A	Pass
30	0	25	B	A	Pass
30	45	25	B	A	Pass
30	90	25	B	A	Pass
30	135	25	B	A	Pass
30	180	25	B	A	Pass
30	225	25	B	A	Pass
30	270	25	B	A	Pass
30	315	25	B	A	Pass
0	0	250	C	A	Pass
0	45	250	C	A	Pass
0	90	250	C	A	Pass
0	135	250	C	A	Pass
0	180	250	C	A	Pass
0	225	250	C	A	Pass
0	270	250	C	A	Pass
0	315	250	C	A	Pass

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
- ☐ The nominal voltage of EUT is 230V.
- ☐ EUT stopped operation and could / could not be reset by operator at _____.
- ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

13.7. Test Photograph

Test Mode : Mode 3: Read

Description : Voltage Dips and Interruption Test Setup

Test Mode : Mode 4: Scan to PC

Description : Voltage Dips and Interruption Test Setup

Test Mode : Mode 5: Charge

Description : Voltage Dips and Interruption Test Setup

14. Attachment

➢ EUT Photograph

(1) EUT Photo

(2) EUT Photo

(3) EUT Photo


DVE
Switching Adapter/电源适配器
交換式電源供應器
MODEL/型号/型號:DSC-5CU-05 050100
INPUT/输入/輸入:100-240V～50/60Hz 0.2A
OUTPUT/输出/輸出:+5V⎓1A
LEVEL3 EFFICIENCY LEVEL: V
BZ02
中国制造/中國製造 Made In China